GENERAL PLAN

JANUARY 1994

CITY OF BELVEDERE

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January 1994

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I. INTRODUCTION AND GENERAL OBJECTIVE

The Belvedere General Plan provides the City with an integrated guide to decision making now and in the future. It seeks to deal with matters important to the City as it approaches full development, at levels appropriate to community concerns.

The plan recognizes that Belvedere is part of the Tiburon Peninsula, Richardson Bay communities, and Marin County. It identifies areas where cooperation and participation can assist the City in achieving its own objectives.

Major policy recommendations from the 1988 Belvedere General Plan are included where they are relevant to current needs. Since there is almost no vacant land, it may appear that change occurs very slowly in Belvedere. But changes in the ways residents use and desire to use their properties alter the fabric of the community, and increasing economic pressures have resulted in subtle changes to the character of the City. Further, significant changes to municipal financial conditions caused by the passage of Proposition 13 in 1978 and by later, similar legislation have altered the City's capital improvement programs and redirected some City goals. Passage of special tax override measures by the residents of Belvedere have permitted the City to reinstate street and drainage repair programs.

It is the overall objective of the Belvedere General Plan to preserve the character of Belvedere, to monitor development, and to insure that new construction, renovation, and remodeling does not damage the sensitive environment and stress the limited infrastructure of the City of Belvedere.

The Belvedere General Plan is designed for a five-year target period with provision for review at the end of that period to insure that the City's goals reflect the needs and desires of the community.

II. LAND USE ELEMENT

Belvedere is a community embracing two island promontories at the southwestern tip of the Tiburon Peninsula and a lagoon-landfill area linking the islands to the mainland. From the islands, there are sweeping marine views of the surrounding bay area. Within the landfilled area, there are views of and direct access to the more intimate lagoon. Fine weather complements community assets -- since among the marine micro-climates of the Bay area, the weather generally has more sun and less fog than that of its neighbors. With these environmental qualities, Belvedere has looked inviting to Bay Area residents for over 90 years, and has become one of the most desirable and attractive residential communities of the Bay Area.

Many of the permanent early Belvedere homes -- from around the time of the turn of the century -- were built above Belvedere Cove for summer and leisure use. Some early residents anchored arks or houseboats in Belvedere Cove during the summer and wintered in the sheltered lagoon behind Beach Road. Subsequent development occurred in the area around Laurel Avenue, followed by Corinthian Island and the western side of the island. In the 1950s and 1960s, San Rafael Avenue and the areas of the Lagoon, North Point, and West Shore were built, followed by apartments along Beach Road. Current development consists of remodeling and enlarging existing residences, and the construction of individual residences on the islands' scattered undeveloped lots, of which less than 20 remain. There have been some new lots created as old, large estates have been divided. The high prices of land and homes in Belvedere have also contributed to the pressure to divide these remaining large lots. Many of the remaining undeveloped lots are very steep and may have geologic problems associated with their development. As a consequence, in 1985 the City passed a Grading and Erosion Control Ordinance to permit detailed geotechnical review of these situations.

A. SETTING

1. Population

In 1990, the U.S. Census showed the City with a population of 2,147 people and 1,037 dwelling units. This indicates a household size of 2.22 people per household, somewhat higher than the County average but reflective of the large homes found in Belvedere. Seventeen percent of Belvedere residents are under 18 years of age and 23% are over 65. Belvedere is a city nearing the building capacity of its land. The city's growth curve is typical of a community approaching full development: 19% of its units were built prior to 1940; growth peaked in the post World War II period during the 1950s when 35% of the city's houses were built (at an average of 45 units per year); growth

dropped to 20 units per year in the 1960s and to 5 per year in the early 1970s. In the 1975 to 1986 period, a total of eleven homes were built, according to City records. City records indicate that in the past six years, 1987 through 1992, a total of 17 housing units were constructed, 16 in 1988 and 1 in 1992.

2. Residential Land Use

Belvedere is clearly a predominantly residential rather than a "balanced" community, with well over 90% of its land area either in residential use or zoned residential. Nearly all employment needs, and most residential service needs, are met outside Belvedere. There are three distinct residential areas of the community.

The Lagoon area consists of about 275 small- to moderate- sized lots, ranging from around 5,000 to 12,000 square feet in size. They contain predominantly one and two story homes, which were mainly built in the 1950s and 1960s. Most of the lots in this area front on the waters of the Belvedere Lagoon, an artificial lagoon created by diking off portions of San Francisco Bay. Tide gates control the flow of water between the Lagoon and the Bay. Some of this area may be subject to flooding during severe high intensity storms.

Corinthian Island is a small natural island, about half of which is within the City of Belvedere and half within Tiburon. Lots on Corinthian Island are in general very small, and the homes are generally a mixture of both old and new. The streets are very narrow and slopes are very steep. There are 55 developed parcels, and one undeveloped lot which is large enough to permit development of a new home.

Belvedere Island is the oldest historical section of Belvedere and contains about 510 lots. Most of the land was originally subdivided by the Belvedere Land Company during the late 1800s and early 1900s. Homes built from that time to the present have been constructed on lots ranging in size from less than 5,000 square feet to over one acre in size. The island is characterized by a variety of architectural styles and sizes of homes, as well as by its dense, mature vegetation and narrow, winding streets.

In addition to these three main areas of single family housing, there are sections along lower Beach Road and San Rafael Avenue which accommodate multi-family housing. There were 162 such units in 1985 and 13 additional units were built in 1988.

The three single family residential areas comprise 273.7 acres of land, 20.35% of the total area of the City. The remaining land areas include almost 13 acres of land allocated to multi-family residential development (0.9% of area), which is concentrated

along Beach Road and Community Road, 2.6 acres (.2% of the area) of commercially zoned property adjacent to downtown Tiburon, and 17.48 acres of land in public and quasi-public uses including churches, City Hall, and the parks and open space lands, as listed in Table LU-1 below. Water area is 1,030.38 acres, 76.6% of the total area of the City of Belvedere.

TABLE LU-1: EXISTING LAND USES -- CITY OF BELVEDERE -- 1993

Use	Acres	% of Total
Single Family Residential	276.70	20.6
Multi-Family Residential	12.74	0.9
Offices/Commercial	2.60	0.2
Public Facilities	0.72	> 0.1
Churches & Schools	1.88	0.1
Public Parks/Recreation	6.11	0.5
Private Recreational	1.11	0.1
Open Space	7.66	0.6
Undeveloped	5.34	0.4
Total Land Area	314.86	23.4
Water Area	1030.38	76.6
TOTAL	1345.24	100.0%

3. Commercial and Industrial Uses

Many residents take the bus, ferry, or a car to San Francisco or other Marin County jobs. The employment base within the community is very small; a few offices, retail businesses, a branch bank, two yacht clubs, and occasional construction activities supply most intown jobs. According to the 1990 U. S. Census, 115 Belvedere residents work at home, and the mean number of minutes that residents commute to work is 30.

Commercial uses within the City consist of the portion of the Boardwalk shopping area which lies within the City boundary and the office spaces found along Beach Road near the San Francisco Yacht Club. Therefore, most neighborhood shopping and services needs are met in the other shopping areas of the Tiburon Peninsula: in downtown Tiburon, the Cove shopping center, or at Strawberry Village. No industrial uses are permitted within the City.

4. Recreational/Open Space Uses

Most of the recreational uses are related to San Francisco Bay. There are two major yacht clubs and the Belvedere Sailing

Society. For parks, the City has the Community park adjacent to City Hall (which has a basketball court, a small active play space and children's play facilities), the park in Beach Road opposite the San Francisco Yacht Club, Tom Price Park, Cove Beach, and the San Rafael Avenue walkway along the shoreline of Richardson Bay. Private open space -- yards adjacent to most houses -- takes care of most small-scale play and open space needs. Two private recreation clubs in Tiburon with swimming pools, tennis courts, and club house facilities, are used by many Belvedere residents for active play. Additionally, the Joint Belvedere-Tiburon Recreation Committee operates six tennis courts: two at Lagoon Road Park, two at Point Tiburon, and two at Del Mar School in Tiburon.

Other active and passive play needs, such as those frequently met in communities by playgrounds, playfields, and neighborhood or community parks ranging in size from three to ten acres, are available in public or private facilities in neighboring Tiburon. Opportunities for expansion of recreation facilities in Belvedere are few. Tom Price Park was developed in 1978; the San Rafael Avenue seawall, with its walking path extending to the Richardson Bay Lineal Park Multi-Use Path, was completed in 1985. The City also owns open space along Beach Road where it fronts on the Bay in Belvedere Cove. A system of walking pathways and lanes also exists, and a study is being done to determine which of these can be upgraded to provide for recreational walking.

5. Community/Public Facilities

Among the City's community facilities, there are two churches, and a City Hall and Community Center, as well as the City's Corporation Yard. The City owns its own sewerage system and contracts for maintenance and waste disposal with Tiburon Sanitary District No. 5. Water is supplied by the Marin Municipal Water District. Both systems are capable of handling the expected small amount of additional growth. Community Center facilities on the lower floor of City Hall are used for recreation classes and community meetings.

6. Educational Uses

There was one elementary school -- Belvedere School -- in the city. It housed two elementary grades of the Reed Union School District, but declining enrollments since 1975 caused the closure of this school. The School District then sold the property to the Belvedere Land Company, which redeveloped the site for housing. The only other school facility in the community is a nursery school on Cove Road Place. Elementary students now attend Reed School, Bel Aire School, or Del Mar School in Tiburon; high school students go to Redwood High School in Larkspur or attend private schools. According to the 1990 U. S. Census, 92% of Belvedere residents over the age of 18 have attended college.

B. ISSUES

During the 1970's and 1980's, increasing land values and property taxes had an adverse impact on development in Belvedere. Buildings disproportionate to lot size have been proposed, and some have been built. Some large lots have been subdivided and sold off to defray high property taxes and provide income. The lack of density regulations in the residential zones raised fears of inharmonious development. In 1990 the Design Review Ordinance was amended to strengthen the criteria for consideration of Design Review applications. In 1991 and 1992, the Zoning Ordinance was amended to add floor area ratios in all single-family residential zoning districts to control the bulk and mass of new houses plus additions to existing houses.

Exhibit 1 is a map showing Existing Land Use. Table LU-1 on page 4 shows the present land uses in the City of Belvedere.

C. POLICIES

1. Significant new development is discouraged. Building is permitted only on existing legal lots of record or new lots of legal size for the residential zone in which they lie.

2. Residential densities shall be controlled to preserve the character of Belvedere. The two single family zones -- R-15, requiring 15,000 sq. ft. of lot area per unit, and R-1, requiring 7,500 square feet of lot area per unit -- are retained.

3. New construction is to be in harmony with existing development. To ensure reasonable intensity of lot use, ensure high environmental quality, and maintain the density and character of the neighborhoods, the City has design review standards in addition to controls on height, bulk, floor areas, and setbacks.

4. The circulation system is to be retained essentially as is, with no improvements planned beyond those needed to remove safety hazards.

5. Opportunities to expand the supply of moderate income housing in response to needs of the current population are to be explored and implemented. A site adjoining the Christian Science Church on San Rafael Avenue was developed in 1988 into 11 units of senior citizen/handicapped moderate income housing. Further, a second unit ordinance was adopted in 1981 allowing for up to 50 such units; all of these units had been allocated as of 1987. Whether or not to permit additional second units, above the original 50 units allowed, is a decision for the City Council.

6. The open water surrounding Belvedere is to be kept open in perpetuity. In 1984 the City adopted the Richardson Bay Special Area Plan, along with the other three cities and the County of Marin which adjoin the Bay. This Plan provides for a vessel-sewage no-discharge area to be created in Richardson Bay, and for changes to the anchorage regulations in the Bay and in Belvedere Cove which will help to eliminate the random anchoring of boats throughout the Bay. The City incorporates the policies of the Richardson Bay Special Area Plan (RBSAP) into this General Plan.

7. A desirable feature of every Belvedere home should be usable outdoor open space. Minimum usable outdoor living space standards were incorporated into zoning and building regulations for the multi-family zones.

8. Views of the Bay, San Francisco, and the mountains are to be retained wherever possible. The Zoning Ordinance includes provisions for the dedication of a view site or easement.

9. Present density and intensity standards (and existing densities) are as follows:

   a. R-1 zones: 2.5 to 5 dwelling units per gross acre. 6.75 to 13.5 persons per acre. The total floor area permitted, without an Exception, is 50% of the lot size in the R-1C (Corinthian Island) and R-1L (Lagoon Area) zones and 40% of the lot size in the R-1W (West Shore Road) zone.

   b. R-15 zone: 1 to 2.5 dwelling units per gross acre. 2.7 to 6.75 persons per acre. (Small lots in this zone raise the current density range to 1-3.0 d.u. per gross acre.) The total floor area permitted, without an Exception, is 33% of the lot size.

   c. R-2 zone: 5 to 14.5 dwelling units per gross acre. 13.5 to 39 persons per acre.

   d. R-3/R-3C zones: 5 to 20 dwelling units per gross acre. 13.5 to 54 persons per acre.

   e. R-3/SC-H overlay: Same as R-3, except density may be increased upon Planning Commission's

findings of benefit to the community and lack of environmental impact.

f. C-1 — Floor Area Ratio not in excess of 1:1. Not over 50% of lot covered. Minimum lot of 5,000 square feet.

10. Based on the seismic and geologic study in which the City participated with the County in 1975, additional regulations have been added to the City's code requiring special geologic studies prior to any development of sites in hazard areas. Further studies may also show some small areas within existing residential zones which should not be developed for reasons of safety.

11. Definition and relocation of the City limit lines between Belvedere and Tiburon has been under discussion with the intent to solve the remaining problems. Concerns include the line through the Boardwalk Shopping Center, and resolution of the boundary of the Corinthian Yacht Club, which has its clubhouse in Belvedere and its berths and parking area in Tiburon.

12. Opportunities to provide additional recreational facilities in Belvedere should be explored and encouraged. In particular, the existing lane and path system was surveyed in a 1986 study. (See Circulation Element).

13. A study of all remaining properties capable of being subdivided under present regulations should be undertaken with an analysis of the potential for additional development, geologic hazards, environmental impact, and other factors. If necessary, the zoning regulations and Subdivision Ordinance should be amended to change the conditions under which existing large lots may be divided.

14. Due to the close proximity of many homes in the Lagoon area, and the issues of privacy which this raises, consideration should be given to determining the feasibility of restricting the amount of second story building which can occur on each lot in the Lagoon area.

15. The City should periodically review its Zoning and Design Review Ordinances to determine if revisions are warranted, and to give the Planning Commission and City Council more specific standards by which to review proposed building projects.

III. CIRCULATION ELEMENT

The Circulation Element is designed to offer a balanced circulation system which will promote public health, welfare, and safety, as well as preserve and enhance the quality of the community's environment. Underlying the preparation of transportation proposals for Belvedere is the City's long-standing policy that there will be no substantial change in the current road network.

A. SETTING

1. Automobile Circulation

The auto circulation system in Belvedere consists of 10.5 miles of roads and represents a "full development" of the very simple road system. Tiburon Boulevard, a state highway, serves the city as its major arterial street providing inter- and intra-County access. San Rafael Avenue, upper and lower Beach Road, Belvedere Avenue, West Shore Road, and Golden Gate Avenue form a secondary loop. Bella Vista, Fern (between Madrona and Oak), Laurel, and Oak Avenues act as central collectors. Most of the streets are interconnected so there is a two-way access to most residences. (See Exhibit 3.)

Among suburban cities, Belvedere has a street system which shows singular regard for topographic and environmental conditions and disregard for auto movement. Most of Belvedere's streets are narrow and curving -- in many places so narrow only one car can pass at a time, while another waits in one of the "pull out" positions provided along its length. Many also have substantial grades. Interestingly, most streets were located on the steep terrain of the island, leaving more level ground for building sites. Road widening is not only infeasible but nearly impossible -- even if the community wished to do it.

From one point of view, the narrow curving streets are a community asset, reducing the amount and speed of traffic, reducing noise and pollution, and creating an atmosphere in which cyclists and pedestrians can feel relatively safe.

But Belvedere's streets function at a minimal level: they provide access to and from housing for residents and for service vehicles and they serve as access for emergency vehicles in the event of need. However, the streets can easily be blocked in some places by a stalled vehicle or an illegally parked car. Enforcement of parking laws, removal of illegally parked cars and other vehicles, and a continuing emphasis on requiring residents who wish to add to their homes to provide the necessary off-street parking is required to allow the streets to function safely for all. (See "Community Safety") Modification of

Belvedere's narrow streets to improve sight distances and to create additional on-street parking will improve the safety of the streets for drivers and pedestrians.

Most suburban communities generate between 8 and 10 trips per house each day. Counts taken by the Town of Tiburon in late 1985 indicate that average daily traffic on San Rafael Avenue, at its intersection with Tiburon Blvd., is about 1,900 cars per day; at Beach Road, south of Tiburon Blvd., traffic is about 2,150 cars per day. Given Belvedere's approximately 1,000 residential units, the traffic on these two streets alone equals almost 4 trips per household per day. Additionally, there is some traffic which does not pass either of these intersections, and some traffic (such as on Beach Road) which does not enter Belvedere at all (coming from Main Street in Tiburon). Therefore, it is probably correct to state that the average daily traffic in the City is probably now closer to the 8 to 10 trips per day per home found in most suburban communities.

A small increment of growth is anticipated in Belvedere, which will generate a corresponding increase in traffic on a system already near capacity.

2. Parking

Belvedere and Corinthian Islands' narrow streets and steep hillsides contribute to a severe parking problem. Most of the remaining undeveloped sites are very steep, and providing the required two parking spaces per unit is difficult. Many of the older houses do not have any off-street parking. On-street parking on Belvedere and Corinthian Islands is very limited and road widths do not allow any additional on-street parking in most places. The City should make every effort to require parking for all new homes, as well as upgrading parking for homes when remodeling is approved. The Zoning Ordinance requires conformance with parking requirements as a condition of Design Review approval when an addition of more than 100 sq. ft. is proposed. Where possible, additional roadside parking should be created. The City should also require that adequate off-street parking be created when homes are remodeled, and that parking be kept available for cars and not used (as are many garages) for storage and workshop space.

In the Belvedere Lagoon area, streets are wide enough to provide adequate on-street parking, and virtually all of the homes have off street garages or carports. However, commuter parking by ferry and bus riders has become a significant nuisance on Lagoon,

Cove and Beach Roads, and some parking regulations such as preferential parking decals and limited time parking have been implemented to alleviate these problems.

3. Public Transit

The Golden Gate Transit District provides Belvedere with inter-city bus service, primarily to San Francisco and other parts of Marin County. During commuting hours only, buses run along San Rafael Avenue and lower Beach Road. Non-peak hour bus service is confined to Tiburon Boulevard. Supplementing bus service to San Francisco are three popular ferry runs between Tiburon and San Francisco per commute time, both in the morning and evening. There is no intra-city bus service within Belvedere.

4. Pedestrian Ways

Several walks and lanes exist to serve Belvedere pedestrians. Walks follow the contours of the land; lanes ascend or descend Belvedere and Corinthian Islands. Some are remnants of the times when walking was a more popular activity in Belvedere and are now in disuse, but all are increasingly important as alternatives to auto use and for use in emergencies. Lanes are being improved and kept in usable condition. A 1992 survey of Belvedere's lanes and paths indicated that the following lanes were in use and were being maintained:

> Corinthian Lane, Corinthian Steps, McLean Lane, Pagoda Lane, Woodland Lane, Cedar Lane, Hawthorne Lane, Pomander Walk, Transpac Lane, Harry B. Allen Lane, and Woodwardia Lane.

The following lanes were listed in the 1992 report as recommended for major improvements: Hawthorne Lane, Park Lane, Pagoda Lane, Cedar Lane, and Woodwardia Lane. The 1992 report also suggested that existing utility easements be studied as to whether they might also be used by pedestrians.

B. POLICIES

1. City policy to keep the present road network intact, as shown on the Circulation Map, should be continued. The City should conduct traffic studies as needed to address safety considerations for all of Belvedere's streets. Improvements to streets should be designed to improve the safety, sight distance, and parking conditions of the streets rather than to increase their capacity. Pedestrian circulation and safety should be an important consideration in determining what street improvements are made. Sidewalks should be encouraged.

2. Traffic generated by construction activities, tourists, and special events (such as Opening Day, fireworks displays in the Bay, etc.) should be discouraged from using Belvedere's street system. Alternatives for construction

traffic should be studied, and specific regulations about such traffic and the parking of construction vehicles should be implemented.

3. As required by ordinance, off-street parking is to be created and maintained through the planning approval. The City shall encourage residents to provide additional off-street parking and shall require that the parking requirements of the Zoning Ordinance are met. Further, the City should require that the off-street parking spaces be continuously available for the parking of cars and not used for non-parking use, such as storage or workshop space. Tandem parking (end-to-end spaces) shall not be considered to fulfill the requirements for more than one of the required parking spaces. The City shall also encourage the creation of additional on-street parking where it is possible to do so, either within the right-of-way or partially on private properties.

4. Alternatives to the use of private cars should be explored jointly with Tiburon and/or the County for feasibility in Belvedere. The purpose would be to serve intra-city and intra-Tiburon Peninsula transit needs, including pickup and drop off at key transit exchange points such as the ferry and Alto Wye. The development of a local taxi system for the Tiburon Peninsula should be encouraged.

5. The pedestrian system of lanes and paths should be upgraded. Belvedere Way has been improved to provide for safe pedestrian use and should be further improved to make the grade available for vehicular use during emergencies.

6. The City should maintain all roads within the existing system in full service condition. If roads are damaged by slides or other disasters, they should be restored to full service as soon as practicable. Two means of ingress and egress should be provided for every residence, except for very short cul-de-sacs.

IV. HOUSING ELEMENT

The Housing Element, required under state law, consists of policies and programs for the improvement of housing, providing for adequate sites for housing, and containing "adequate provision for all economic segments of the community."

These goals have been specifically identified by the state:

1. To promote and insure the provision of adequate housing for all persons regardless of income, age, race, or ethnic background.

2. To promote and insure the provision of housing selection by location, type, price, and tenure.

3. To promote and insure open and free choice of housing for all.

4. To act as a guide for municipal decisions and how these decisions affect the quality of the housing stock and inventory.

Within this general framework, the Housing Element of a community needs to be viewed in the context of its housing market area since many housing problems are area-wide or regional in nature and require interjurisdictional solutions. Thus, communities are urged to review their Housing Elements in the context of their county's Housing Element and the Association of Bay Area Government's (ABAG) regional housing studies.

Belvedere, incorporated in 1897, is an old, established community. With a 1990 housing stock of 1037 dwelling units, it represents a small, mostly developed portion of the much larger housing market area of the Richardson Bay communities: Belvedere, Tiburon, Sausalito, Marin City, Mill Valley, and Strawberry. The Richardson Bay communities in turn are part of Marin County's housing market.

This Housing Element was previously updated in 1988.

The Legislature has declared that housing is of vital statewide importance. Attainment of the high priority goal of decent housing and a suitable living environment for Californians requires the cooperation of all levels of government and the private sector. Especially important is the provision of housing affordable to low- and moderate- income households. Each city also has the responsibility to consider local economic, environmental, and fiscal factors, as well as community goals, when it addresses its housing needs.

This Housing Element is intended to guide Belvedere's housing

policies and programs and their relationship to regional housing goals and activities to promote and ensure the provision of:

1. Adequate housing for all persons regardless of income, age, race, sex, marital status, ethnic background, or other arbitrary factors.

2. Housing selection by location, type, price, and tenure.

3. A balanced residential environment with access to employment opportunities, community facilities, and adequate services.

Included in this Housing Element are the following:

1. Identification of housing needs, resources, and constraints including demographic and housing characteristics data.

2. Policies, goals, and quantitative objectives to maintain, improve, and develop housing.

3. A housing program for the next five years (1994-1999).

A. SETTING

1. Population and Housing Characteristics

A summary of population and housing data pertinent to the development of Belvedere's Housing Element follows.

- Belvedere has the highest population density, in terms of persons per square mile of land area, of any city or town in Marin County. With one half square mile of land, excluding underwater bay and lagoon property, and a 1990 population of 2,147, the City has a density of 4,292 persons per square mile.

- From 1980 to 1990, Belvedere experienced a population decrease of 254 persons, yet an increase of 44 in the number of households. This is partially the result of households with two or more persons leaving Belvedere and households with one person moving into the community. It also reflects reduction in family size due to children growing up and leaving home plus divorced and widowed persons remaining in Belvedere as one-person households.

- In 1970, 13.8% of the population was over 62 years of age; in 1980, 16.3% of the population was over 62 years of age and in 1990 that percentage had increased to 27%.

- In 1980, 109 (11.5%) households had incomes of less than $10,000. In 1990 only 39 households had incomes of less than $10,000. Belvedere, with a median income of $104,525 per - household, was among the highestmedian income communities in

California. The 1990 Census reported 1037 dwelling units in Belvedere.

- The 1990 Census indicated that rental stock comprised 21% of the total housing stock. This figure does not appear to include the 52 registered second units

- Approximately 53% of the apartment, duplex, townhouse, and rental second units in Belvedere are occupied by one-person households, and 41% are occupied by two-person households

- Owners of 52 second units were surveyed in 1993.Thirty-six percent were rented to low-income residents; 32% of the 52 units were available for $600 or less per month.

- An August 1993 survey of 154 rental units located in the multi-family residential area of the City indicated that the following monthly rents are charged:

TABLE H-1 RENTAL RANGE - AUGUST 1993

	Average:	Range:
1 bedroom	$1200	$800-1600
2 bedroom	$1900	$1000-2800
3 bedroom	$2975	$2600-3350
4+ bedroom	$3000	$2800-3200

- Since 1987, 17 housing units have been built in Belvedere. Sixteen of these were built in 1988 and one was built in 1992.

- Average sale prices of single family dwellings have changed from $80,350 in 1970 to $317,561 in 1980, $652,636 in 1983, and $985,722 in 1992.

- A cursory look at the exterior of Belvedere homes indicates that few can be classified as deteriorated. Poor housing conditions are not a problem in Belvedere.

2. Undeveloped Site Analysis

a. Undeveloped Sites Inventory:

As of August 1993 there were 16 undeveloped sites comprising 5.34 acres with the development potential of 16 houses. The R-3 site at 515 San Rafael Avenue, next to the Christian Science Church, was developed in 1988 with 11 apartment units for senior citizens with low income and people who are handicapped. A duplex was built on one vacant lot, and houses have been constructed on four other undeveloped sites. There may be a few additional lots containing homes which are subdividible. Table H-2 summarizes the undeveloped sites.

Table H-2 Summary of Undeveloped Sites

No. of Parcels	Zoning	Total Acres	Potential Units
15	R-15	5.14	15
1	R-1	0.20	1

This Housing Element describes a number of constraints which limit the developability of these sites. Virtually all of the sites available have slopes in excess of 35%. Since 1982, severe winter storms have raised questions about the stability of some sites; and construction costs are very high. The Land Use Element recommends that all undeveloped and/or dividable sites be studied to determine the suitability of additional development.

b. Non-Residential Land Inventory:

There is a small amount of non-residential land supporting uses which are well established and intrinsic to the character of the community or essential to support and service the residential sector. Non-residential uses include two churches, two parks, the City Hall and Community Center, two yacht clubs, and 1.88 acres of commercial land.

c. Redevelopment:

The Housing Element adopted in September of 1981 cited the Pacific Telephone building site and the Belvedere School site as possible locations for low/moderate income housing. The City established a special use zone entitled "Senior Citizen and Handicapped Overlay Zone" (SC-H District) which gave owners of any R-3 zone property the option to develop low/moderate income housing for elderly or handicapped persons. The ordinance waived R-3 zoning standards and densities to encourage this use. In November 1983, Belvedere voters approved by 78% a referendum authorizing up to 15 units of affordable housing for low- and moderate-income elderly and handicapped persons.

In 1984 the Pacific Telephone building site was sold to a developer who opted to build 4 market-rate townhouses on the site. This reduced the potential for new, affordable housing development in Belvedere.

The Belvedere School site was declared surplus by the School District in 1984. The School occupies merged parcels totaling about one acre at the southeast corner of Laurel and Bayview Avenues. This site reverted back to the Belvedere Land Company in 1985, and two single family units and four condominium units in the school structure were created. These are market rate units and thus not affordable to low- and moderate- income residents.

The undeveloped 12,500 square foot parcel at 515 San Rafael Avenue, on the southeast side of the Christian Science Church, was developed into 11 units of rental housing for low- and moderate- income senior and handicapped persons by the Belvedere-Tiburon Housing Association.

The redevelopment of residential lands is highly unlikely. Because of the ever increasing property values in Belvedere, people tend to preserve large, old stately homes in excellent condition rather than demolishing the structures. However, on a few very large lots, demolition to allow for subdivision has been approved. It is unlikely that this will result in a significant increase in the housing stock in Belvedere or in any moderately priced units.

3. Housing Needs

a. General Housing Needs:

The Association of Bay Area Governments (ABAG) has published the Housing Needs Determination for all communities in the San Francisco Bay Region. By law, the City must address the City's share of the regional housing need specified in the report.

The method used to derive each city's share considers market demand, employment opportunities, availability of suitable sites and public facilities, commuting patterns, type and tenure of housing, and housing needs of farmworkers (if any). The statistics are derived from ABAG's Projections '88 report which makes a number of assumptions in deriving economic and population projections. The problem with using population models is that even though they may have valid applications for large cities, these models rarely address the unique factors characteristic of smaller communities such as Belvedere.

The housing needs determined by ABAG are classified into two major categories: 1) existing needs indicating how short the cities were in supplying housing for the market demand in 1988, and 2) the projected needs, which indicate the number of units required to accommodate projected household growth between 1980 and 1990 plus additional units to provide an optimal vacancy rate.

ABAG statistics for Belvedere from 1980 to 1990 are summarized as follows:

Unmet Need, 1988:	1 unit
Projected Need, 1990:	4 units
Total Need by 1990:	5 units

Additional need by 1995:	0 units
Total need by 1990:	5 units

ABAG further categorized housing needs by income:

Housing Need by Income Group		
	Very Low =	1 unit
	Low =	1 unit
	Moderate =	1 unit
	Above Mod. =	2 units
		5 units

Given that Belvedere has only 16 undeveloped lots and that they are all zoned for detached, single family residential use, it appears that satisfying ABAG's needs projections on these sites will be very difficult or impossible.

The City's existing 52 second units should be counted towards meeting the housing need for affordable units. It is doubtful that Belvedere will add more than 5 owner occupied units by 1995, given the scarcity of undeveloped land. If any portion of the City's existing rental stock is converted to condominiums before 1995, the resulting need for more rental units might be filled by approval of additional second units.

Belvedere will be relying on second units to provide housing needs for all new very low-, low- and moderate- income households. A survey of second units prepared in 1993 indicated that 36% of the second unit occupants who responded to the survey were in the very low- and low- income categories. New construction of market rate units will meet the need for above moderate-income housing units.

b. Special Housing Needs:

Affordability is usually measured in terms of the percentage of income spent for housing. A household has usually been considered to be spending an excessive amount if it is paying over 25% of its income on housing. In 1990, a total of 356 households were overpaying for housing; 246 overpaying households were owners, and 110 such households were renters. Therefore, 34% of all households were overpaying. A distinction, however, should be made between those who simply cannot afford to live in Belvedere and those who freely choose to spend over 25% of their income on housing costs.

Belvedere's housing program for 1999 will focus on those very low-, low- and moderate- income persons or households which have special housing needs.

1. The elderly living alone: In 1990, 23% or 487 people in Belvedere's population were 65 years of age and older. One hundred eleven of these elderly persons live alone.

2. The elderly on fixed incomes: Although there is no recent data regarding elderly on fixed incomes, a large percentage of those elderly living alone probably rely on fixed incomes. With recent,

rapid inflation, their ability to continue to maintain the same standard of living is threatened. Most of the elderly purchased their homes in Belvedere many years ago and have paid off their mortgages.

While residing in a house which may be worth a substantial amount, the elderly person may be forced to sell the house and move out of the community in order to provide for his or her current income needs if local, reasonably priced rentals or some housing assistance are not available.

3. Overpaying renters: According to the 1990 Census, 110 renters were paying over 25% of their income for housing. Sixty (60) of these overpaying renters are in the very low- and low- income groups.

4. Public Employees: The City of Belvedere employs seventeen persons, all of whom live outside the community. Even those employees who earn above-moderate incomes cannot afford to live in Belvedere without some financial assistance, and moderate rentals are scarce. The same situation prevails among employees of other local government units serving Belvedere, such as school, fire, and utility districts.

5. Large Households: According to the 1990 Census, 34 units in Belvedere were occupied by 5 people and 12 units in Belvedere were occupied by 6 people. These 46 units constitute 4.7% of the City's housing stock. There are no units in Belvedere with more than 6 residents.

6. Handicapped: The number of Belvedere residents between the age of 16 and 64 who are prevented from working is 6. Several of the affordable units at the 11 unit apartment complex on San Rafael Avenue are reserved for handicapped people, regardless of their age.

7. Homelessness: According to the 1990 Census there are no homeless people in Belvedere. In recognition of this problem elsewhere in Marin County the City supports countwide programs to find shelter for the homeless.

B. CONSTRAINTS TO DEVELOPMENT

1. Market Constraints:

The shortage and high price of undeveloped residential sites in Belvedere and the high cost of construction make it virtually impossible to consider any major development of new housing affordable to low- or moderate- income persons. The market so constrains Belvedere as to preclude it contributing much to new housing development of any kind. Also, the City does not own any land which is suitable for housing development or redevelopment.

a. Shortage of Buildable Sites:

Belvedere is virtually built out. Only 16 undeveloped, scattered, single-family residential sites have been identified within the City. Few are actually for sale. Most of these 16 sites are developed as gardens for adjacent large homes in the same ownership and are not expected to be on the market in the near future.

The two small City parks are well used. Present public open space generally is Bay front property largely under water or too narrow and too near Tiburon Boulevard -- the heavily travelled main thoroughfare serving Belvedere and Tiburon -- to be suitable for housing use.

In summary, less than two percent of Belvedere's land is currently undeveloped. The site described in previous Housing Elements at 515 San Rafael Avenue was developed in 1988 into 11 affordable rental units by the Belvedere-Tiburon Housing Association.

b. High Price of Sites:

Undeveloped residential land in Belvedere is among the most expensive in the San Francisco Bay Area. The few undeveloped, single-family sites currently on the market are priced at $500,000 to $1,000,000. Prices are affected by the following: 1) undeveloped property in Belvedere is scarce; 2) almost all lots have spectacular marine views; 3) the weather is excellent; 4) transportation to San Francisco is convenient by ferry boat or bus; 5) the schools are very good; 6) shopping, restaurants, doctor's offices, public and private community facilities, and churches are nearby; 7) the area has an excellent reputation for high quality homes, good security, and public spirited residents; and 8) the community is modest in size. The main disadvantage (or at least considered a drawback for some) is that the streets in the Corinthian Island and Belvedere Island areas of the City are very narrow and winding.

c. High Construction Costs:

The cost of construction in Belvedere is very high, due partially to site improvement costs for sloping sites. (Almost all of the undeveloped sites are on Belvedere Island and are steeply sloping.) It is estimated by developers experienced in the area that construction costs in Belvedere range upward from $175 per square foot. This is more than double the $83.00 figure reported by the International Conference of Building Officials for an average, standard quality house in the San Francisco Bay Area for April 1993. Except for site improvement costs, the cost of new construction in Belvedere might be lowered some, but less expensive construction with reduced amenities and design considerations does not meet market demand for development of choice, high-priced sites.

2. Governmental Constraints:

a. Permit Approval Process:

Applications for building and related permits are generally processed in an efficient manner in Belvedere. Although the City Council and Planning Commission only meet once a month, determination on a project is usually reached in one meeting or two (if the City Council is required to hear the matter.) Design Review is conducted by the Planning Commission. There is no separate Design Review Board in Belvedere. The typical processing time for discretionary review is therefore 2 or 3 months.

Processing fees are commensurate with the fees for the rest of Marin County. Compared to the high costs of undeveloped unimproved land and high site development costs in Belvedere, processing and connection fees are negligible and, therefore, do not present a constraint to development. However, waiver of such fees would help reduce the cost of any proposed affordable housing.

The permit fees involved for development of each of the undeveloped sites would typically run as follows (assuming construction costs of $500,000 for a single family dwelling):

$1,000.00	Design Review
$6,780.35	Building Permit
$2,332.00	Sewer hookup
$10,112.35	Total fees

b. Zoning Regulations:

Zoning regulations do not appear to pose any serious problems to the development of the remaining undeveloped residential sites. Design Review by the Planning Commission is required for all new buildings. Regulations concerning building setbacks and open space are not unusually restrictive. On-site parking is required, but it is not required to be covered by a carport or garage. Steep terrain may require requests for Variances in some cases. Variances are considered on a case by case basis, with environmental problems and design receiving particular attention.

It is difficult to ascertain what the feasibility of granting necessary Variances may or may not be for the undeveloped sites. It is possible for a single family dwelling to be built without Variances on most of the sites.

c. Second Unit Ordinance:

The present second unit ordinance sets a limit of 50 second units. As of August 1993, the City had approved applications for a total of 52 units. The City Council should review the impacts of these units on the City and determine whether or not additional units should be considered, and if so, under what regulations.

d. Lot Area Requirements:

The lot area requirement of 15,000 sq. ft. per lot for the R-15 zone (located in the steep hill areas of Belvedere) may appear to be rather large. However, at the time this zoning density was established, virtually all residential lots were already developed. Belvedere currently has the highest population density, in terms of persons per square mile of land area, of any city or town in Marin County. The public utilities and infrastructure (sewer system and streets) are already operating at capacity. Increasing development densities would be detrimental to the environment and to the safety of the community.

3. Other Constraints:

a. Land Capacity and Environmental Constraints:

All the undeveloped sites zoned for residential development are on hillside land averaging 30-40% slopes. Access to these properties is through narrow circuitous roadways which are not serviced by public transportation. The topography of these sites warrants engineered foundations and specialized designs resulting in very high construction costs. All of these factors pose some constraints to construction, particularly of affordable housing.

b. Private Deed Restrictions:

Private deed restrictions pose an additional constraint to housing construction in Belvedere. Some of the properties in Belvedere carry private deed restrictions which require approval of 75% of the affected neighbors in order for a property owner to subdivide such land and develop additional housing. Even though the property may exceed the zoning standard for lot size and receive subdivision approval by the City, the owner cannot proceed with the subdivision without the required approvals from neighbors. In a specific case, the City granted subdivision approval and design review approval for a single family residence. The neighbors took the property owner to court; the court upheld the deed restriction condition.

c. Limited Availability of Affordable Housing Sites:

Three sites were previously identified as potential locations for low/moderate income housing, but two have been developed for market rate housing. The third site, at 515 San Rafael Avenue, has been developed for 11 low/moderate income senior citizen units. No additional sites have been identified as potential locations for affordable housing.

C. OTHER CONSIDERATIONS

1. Energy Conservation

The City of Belvedere recognizes the need for energy conservation. City administrative policies encourage energy conservation practices in both public and private development and remodeling. In the City's review of landscaping plans, low maintenance and water conserving planting is encouraged.

Further, the City enforces the Residential Energy Standards (Title 24) adopted by the State. The City will make available to the public information regarding PG & E's energy audit, and energy conservation programs administered by the County and other groups. The City will review any available material and useful sources in order to analyze the "front-end costs" in comparison to the "energy cost savings." In development of low- and moderate- income units at 515 San Rafael Avenue, energy conserving techniques were applied to the siting of the units, the design of utility systems, and the selection of materials. The site is located within walking distance of local shops, services, and public transportation.

2. Public Participation

Public hearings on the draft Housing Element of the General Plan were held before the Planning Commission and a public hearing was held before the City Council. Various individuals did comment on the Housing Element. All meetings were noticed in the local paper. Feature articles regarding the Housing Element also appeared in the local newspaper. The City publishes a newsletter quarterly which is sent to all households in Belvedere. Mention of the Housing Element and other elements of the General Plan was made, and participation in its development was encouraged in this newsletter.

3. Consistency With the General Plan

This Housing Element is consistent with the other elements of the General Plan. The policies and programs included in this element do not conflict with any open space designations or goals. The land use map of the General Plan reflects the policies of this Housing Element.

D. GOALS, POLICIES AND OBJECTIVES

Goals

a. Seek responsible area-wide solutions to housing problems through cooperation with other towns and cities, County of Marin, local non-profit housing organizations, private developers, and property owners.

b. Recognizing the very limited opportunities for expanding housing in Belvedere, capitalize on every possible resource to meet the housing needs of the community.

c. Provide for some variety in housing types and prices.

d. Preserve and maintain existing housing.

e. Expand the opportunity for housing available to persons of low- and moderate-income, especially the elderly and public employees, to the limit possible within existing constraints.

f. Relate housing growth to the capacity of the residential service system and high community standards of aesthetics in harmony with the environment.

g. Involve citizens in updating and carrying out housing plans.

Housing Policies and Objectives

1. The City shall maintain a reasonable rental stock, recognizing the need for such units to accommodate those preferring to rent or those unable to purchase homes in Belvedere.
   Objective: To monitor the rental stocke in Belvedere.

2. The City shall make available information regarding City, County, State and Federal housing programs and advise and assist low and moderate income elderly living alone and elderly on fixed incomes having difficulty continuing to own and maintain their homes.
   Objective a) To support financing techniques which will enable eligible low- and moderate-income elderly persons to convert housing assets to needed income without leaving the community; b) To support shared living programs for the elderly by utilizing housing not occupied to reasonable capacity; c) to support property tax reduction and deferral programs for low-income elderly homeowners.

3. The City shall seek to maintain and expand the supply of affordable housing for low- and moderate-income persons.
   Objective: The City should review the impacts of the 52 second units already approved, and determine whether or not additional units should be considered. In processing applications for newly constructed second units, preference will be given to accommodations with low and moderate rentals.

4. The City shall assist in the provision of housing for public employees.
   Objective: To explore various financing techniques which will provide affordable units for public employees.

5. The City shall provide financial assistance where possible through City budget allocations, fee waivers, or cooperation with private fund raising activities to expand affordable housing opportunities in Belvedere and the neighboring housing market areas.
   Objective: a) To support and contribute to the Marin County Housing Authority's rental assistance program; b) To encourage private foundations and individuals to fund non-profit housing programs for low and moderate income persons.

6. The City shall encourage the incorporation of energy efficient systems in all housing to help reduce overall operating costs and to conserve energy.
   Objective: To develop and adopt an energy conservation program for the City.

7. The City shall encourage and support development proposals which provide new housing for low and moderate income households.
   Objective: To process applications for low and moderate income housing in an efficient manner, avoiding unnecessary time delays, waiving building and other City non-recurring fees and, if appropriate, granting density bonuses to make maximum use of available sites.

8. The City shall support fair housing practices and shall encourage housing opportunities for all persons to purchase or rent adequate housing, regardless of age, race, sex, marital status, ethnic background, source of income or other arbitrary factors.
   Objective: To utilize fair housing practices in screening the occupants of the low and moderate income housing projects discussed in this element, and support the fair housing efforts made by the county mediation board and other fair housing organizations.

E. HOUSING PROGRAMS 1988-1993 AND 1994-1999

The State requires a housing program for the provisions of very low, low and moderate-income households in Belvedere. If funding sources continue, Belvedere may assist property owners and rental households, including residents of second units. A summary of continuing and new programs is presented in Table H-3.

1. Continuing Programs:

A number of housing assistance programs are available within Belvedere. The City plans continued support and cooperation for these programs:

a. Section 8 Existing Housing Assistance Payments Program: This program is funded by the U.S. Department of Housing and Urban Development (HUD) and administered by the Marin Housing Authority. Eligible tenants are subsidized the difference between 30% of their income and their rent (which must fall within the fair market rent categories set by HUD). Subsidies are paid directly to the landlord.

TABLE H-3: PROGRAM SUMMARY

PROGRAMS	SPECIFIC ACTIONS	FINANCING	RESPONS.FOR IMPLEMENTATION	TIME FRAME
A. Housing Preservation				
Residential Rehabilitation Loan Program	1) Continue ongoing program 2) Advertise availability of program	CDBG FUNDS from HUD City Manager	City/MCHA Manager Planning Consultant	1994-1999
Condo Conversion Ordinance	1) Continue ongoing program	N/A	Planning Consultant	1994-1999
B. Rental Assistance/Affordability				
1. Section 8 Existing Housing Program	1) Continue ongoing program 2) Advertise availability of program	Section 8 - Existing (HUD)	MCHA	1994-1999
2. Home Equity Conversion Program	1) Advertise availability of this program	Private Banks		1994-1999
C. Promote Affordability				
1. Second Units	1) Consider permitting additional 2nd unit applications	N/A	City Council	1994-1999
	2) Advertise availability of programs to assist renters of second units	City Manager	Planning Consultant	1994-1999
2. Fee Waivers	1) Continue ongoing program	City	Planning Consultant	1994-1999
3. Increased Densities	1) Continue ongoing program	N/A	Planning Consultant	1994-1999

M.C.H.A. = Marin County Housing Authority

b. Residential Rehabilitation Loan Program: This rehabilitation program provides technical and financial assistance with loans to low- and moderate-income persons. Community Block Grant funds are used to generate home improvement loans with interest rates of four to ten percent.

c. Second Unit Program: Currently the City has a second unit ordinance which requires owners of existing and potential second units to obtain a use permit. Although this ordinance does not presently control rents for second units, it does legalize units which typically provide low and moderate rents and would otherwise be abated. In surveying second units in 1993, it was found that nineteen units, or 36%, provided affordable rental housing for lower- and low-income households. One of the purposes of this ordinance is to provide affordable housing for low- and moderate-income persons. As of August 1993, a total of 52 units were approved, the maximum permitted by the City's ordinance.

In 1994 the City Council will consider permitting additional second units. Since the primary negative impact of second units is inadequate parking, the City will focus their attention on areas of Belvedere where parking is not currently a serious problem. All of Corinthian Island and most of Belvedere Island have narrow, winding streets and steep terrain. These features limit parking on the streets and on private property also. Three areas with gentler terrain and wider streets will be studied as sites for additional second units: The Lagoon Area, Britton Avenue and West Shore.

d . Condominium Conversion Program: Belvedere adopted an ordinance in 1983 which regulates the conversion of apartments to condominiums. The city recognizes the potential impacts of condominium conversions upon the rental stock.

e. Home Equity Conversion Program: The purpose of this program is to help low income elderly homeowners derive income from the equity in their homes while continuing to live in them. Loans are made to seniors based on the equity in their home; the loans must be paid back at the end of a specified term. Another option is the sale and leaseback plan whereby the senior sells the home to either an investor or an heir, who leases the property back to the senior for life. Usually the senior receives a substantial monthly payment from the buyer of the home. The City shall continue to support this program and assist in advertising its availability to seniors within the community.

f.) Community Development Block Grant Program (CDBG): The City participates in the allocation of Federal CDBG funds throughout the County. Belvedere has received CDBG dollars in the past and intends to request additional grants available for future years.

g. Fee Waiver Program: The City shall waive planning and building permit processing fees and sewer connection fees for projects which include low or moderate income units.

h. Increased Densities: The City will approve 25% density bonuses for low income housing proposals and waive or amend current zoning limitations as necessary. The City's Senior Citizen and Handicapped Overlay Zone waives density limits and numerous zoning standards to assist in development of affordable housing for such persons.

2. Analysis of Previous Element

The goals and objectives of the Housing Element in the 1988 Belvedere General Plan were partially implemented by the programs in the 1988 Housing Element:

a. Section 8 HUD Program: In 1990 there were 3 households assisted, but there are currently no Belvedere households who are assisted. This program is still available and is listed as a continuing program for Belvedere.

b. Residential Rehabilitation Program: In 1988 there was 1 Belvedere household assisted, and in 1990 there were 3 households assisted. In 1992 and 1993 no Belvedere property owners were participating in this program

c. Second Unit Program: This program continues to provide the majority of Belvedere's affordable housing. Of the 52 legal second units in Belvedere, 19 are providing affordable rents to City residents. In 1994 the City Council will consider expanding this program to permit 5 additional second units.

d. Condo Conversion Program: The Ordinance which implements this program has not been used to date. This Ordinance is available to protect existing apartments if they become threatened by conversion to condos.

e. Home Equity Conversion Program: This program was previously referred to as the Reverse Annuity Mortgage Program (RAM). In 1990 5 Belvedere households participated in this program. The number currently participating is unknown since this program is now provided by banks, not government agencies.

f. Community Development Block Grant Program (CDBG): In 1993 Belvedere did not receive funds through this program. The City intends to request CDBG funds for future housing programs in Belvedere.

g. Fee Waiver Program: Fees were waived for the 11 unit project constructed in 1988 to provide affordable rents for senior citizens.

h. Increased Densities: The Belvedere Zoning Ordinance was amended to add an overlay zone for affordable housing for senior citizens and handicapped people. This zone accommodated the 11 unit apartment building constructed on San Rafael Avenue. In addition to providing a density increase, this zone also has special standards for parking and unit sizes.

3. Belvedere's Five Year (1994-1999) Housing Program:

- Thirty six percent of Belvedere's 52 second units provide affordable units for low- and lower-income households. It is assumed that 36% of any additional second units will also provide affordable units for lower- and low-income households. The remaining 33 units provide housing primarily for above moderate-income households.

Table H-4 indicates the housing programs utilized to assist low-income households in Belvedere:

TABLE H-4

Low-Income Households Benefiting from City Programs: Existing and Projected

No. of Households		Program
1993	1999	
Unknown	Unknown	Home Equity Conversion Program
19	19	Second Units
0	3	Section 8 (HUD)
19	22	Total

F. QUANTIFIED HOUSING OBJECTIVES: (1999)

In order to meet the housing needs determined by ABAG, Belvedere will attempt to achieve the housing mix described in the following table. The achievement of these objectives depends on the continued funding of rentals subsidy programs and the continued desire of most second unit owners to rent out their units. In granting second unit use permits, the City shall give priority to those groups which have

been identified as having special housing needs (elderly living alone and on fixed incomes, households headed by single parents, and public employees). Table H-5 summarizes Belvedere's housing objectives for 1999.

TABLE H-5

Quantified Housing Objectives for 1999

Programs:	Very Low	Low	Moderate	Above Mod.	Renter	Owner
- Home Equity Conversion	Unknown		Unknown	Unknown	0	Unknown
- 2nd Units	5	5	9	38	57	0
- Section 8	1	1	1	0	3	0
- New Construct. (undev. land)	0	0	0	5	0	5
Totals	6	6	10	43	60	5
ABAG Targets	1	1	1	1	3	2

V. OPEN SPACE, SCENIC ROUTES & CONSERVATION ELEMENT

In 1972 a long-range development plan for parks and recreation was prepared, including the entire open space fabric of the City.

A. SETTING

1. Environmental Quality -- Existing Environment

As a compact, small scale, almost wholly developed community, Belvedere's environmental assets include: structures that tend to fit with existing hill and lagoon terrain; lush vegetation; narrow winding streets; open water surroundings; magnificent marine views from the streets, walks and lanes; intimate, inward-oriented views for the Lagoon area; and important public open spaces, including Community Park, Belvedere Cove, San Rafael Avenue waterfront, and Tom Price Park. Vistas of the Tiburon hills and ridge and of the Sausalito waterfront and hillsides form a backdrop to Belvedere residents' vistas, and are an important part of Belvedere's environmental context.

2. Existing Open Space

Existing permanent open space includes water related areas, parks, lanes, paths, and view areas.

a. Water Related Areas:

1. The open water and landlocked water areas within the city limits.

2. The city-owned beaches and tidelots, including parts of the Belvedere Cove and the edge of Richardson Bay along San Rafael Avenue and West Shore Road.

3. The privately owned harbor and tidelots, including approximately 1,000 linear feet along Beach Road owned by Belvedere Land Company, and the San Francisco Yacht Club.

b. Parks:

4. "Community Park," the city park adjacent to Community Hall.

5. "Tom Price Park," the strip between Lagoon Road and Tiburon Highway.

6. The small, City-owned, central island at

the intersection of Beach Road and San Rafael Avenue.

c. Lanes and Paths

7. The lanes and paths are discussed in detail in the Circulation Element of this General Plan.

d. View and Other Areas:

8. Areas providing views of Belvedere Lagoon are found along San Rafael Avenue between Windward and Edgewater Roads, on Lagoon Road at the Belvedere Sailing Society, and at the dredging access to the Lagoon near the end of Mallard Road.

9. "Cove Beach," the area along Beach Road between the China Cabin and the Tiburon Town limit.

10. View area at Beach Road and Belvedere Avenue at the Winifred Allen Bench.

11. View easements at turn-arounds on West Shore Road.

12. Cliff areas above West Shore Road owned by the City.

13. Corinthian Island Overlook at the southeast end of Corinthian Island.

14. All existing lanes on Belvedere and Corinthian Islands, whether in use or dormant.

15. Various small spaces at street junctions where City-owned rights of way permit development, in varying degrees, of small rests, short-cut walks and steps, planted areas, etc.

Examples are:

Juncture of Oak and Bella Vista Avenues
Juncture of Oak and Bayview Avenues
Juncture of Fern and Madrona Avenues
Juncture of Lagoon Road and Tiburon Boulevard
Circular park at end of Golden Gate Avenue

16. Underdeveloped privately owned properties, including buildable lots and non-buildable contiguous substandard lots.

17. Gateway to Belvedere at the intersection of San Rafael Avenue and Tiburon Blvd.

18. Views and vistas of open lands in surrounding communities including Tiburon, Sausalito, Strawberry and Mill Valley.

B. OPEN SPACE PLAN

The Parks and Recreation Long Range Development Plan, adopted in 1970, incorporated plans for individual and key public open spaces within an open space system plan which includes the two important scenic routes and the proposals concerning the design considerations of important auto and pedestrian ways. The open space plan is depicted in Exhibit 3. The following specific plans and recommendations are incorporated by reference:

For public open spaces, the plans for:

1. Main park at the Community Center Complex
2. Cove Beach
3. Tom Price Park
4. The island at Beach Road and San Rafael Avenue, in front of the San Francisco Yacht Club.

For scenic routes:

1. Tiburon Blvd. view of Tom Price Park
2. San Rafael Avenue and Beach Road
3. The Pedestrian System: walks, lanes, and proposed interconnections.

Additional Recommendations

1. Where there is pedestrian access to beach and water areas, it should be maintained. Potential for additional views or access along unmaintained or unimproved lanes should continue to be investigated.

2. As an alternative to acquiring open space properties through eminent domain proceedings, a Belvedere land trust or foundation has been created to assist in financing the acquisition of open space land, easements and development rights, and in holding such properties on behalf of the City.

3. The City should continue ongoing efforts to assist the Town of Tiburon in securing open space which is visually important to the City of Belvedere. In 1993 Belvedere and Tiburon voters passed Measure L, a bond

issue to acquire open space in Tiburon.

C. POLICIES

The following are the environmental quality policies and related implementation devices.

1. Views are to be preserved.

2. Open space should be secured by a variety of means, including purchase, dedication of land, development rights, and view easements or view corridors. Provisions for dedication were incorporated as part of Zoning Ordinance revisions.

3. Encroachment on open water should be limited to public trust purposes. At present, open water is protected by a combination of public ownership, Audubon Society and yacht club ownerships, recreation zoning, and Army Corps of Engineers and Bay Conservation and Development Commission (BCDC) jurisdiction. BCDC's San Francisco Bay Plan imposes such stringent limitations that it is unlikely development would be permitted on the few privately held open water lots. Additionally, the Richardson Bay Special Area Plan, adopted by the City in 1985, recommends against any development of open water areas. Zoning should be provided for these areas.

4. The scenic qualities of major circulation routes within the city should be enhanced.

5. All public and private actions that significantly affect the quality of the environment will be reviewed in accordance with the unique characteristics of each proposed action and each potential location under the specific mandatory procedures adopted. The responsibility for this review is delegated to the Planning Commission.

   As mentioned in the Land Use Element policy section, considerations of view, of compatibility with the surrounding environment, and of intensity of site use are factors to be reviewed.

6. Areas prone to geologic hazards should be closely regulated, field investigation of hazards prior to development should be required, and the City should consider dedication of land as open space for safety reasons. However, liability and insurance considerations may limit the City's ability to accept dedication of such

properties or to permit their development.

7. The City should continue to cooperate with the Town of Tiburon in preserving open space in Tiburon which has a major visual impact on the views of residents of Belvedere. Further, efforts should be made to work with other neighboring communities in their efforts to preserve open areas which are visible from Belvedere. The City of Belvedere should preserve open space visible from neighboring communities.

VI. ENVIRONMENTAL HAZARDS ELEMENT

A. BACKGROUND

1. Purpose

This Environmental Hazards Element of the Belvedere General Plan examines some of the special problems of developing property in Belvedere's unique environment, and proposes strategies to insure that Belvedere remains a safe, as well as an environmentally attractive, setting.

The text is arranged to:

- Provide an introduction to the environmental setting of Belvedere, in geologic, seismic and other hazard terms.
- Describe the relationships of these natural hazards.
- Propose policies designed to lessen the costs and dangers of these hazards.
- Append and reference important technical and background information.

The objectives of this element are to reduce potential injury or loss of life and to lessen possible property damage. City initiated measures to lessen risk to human life and property should focus upon:

- Areas identified as known or suspected greatest natural hazard areas; and
- Those hazards which can be avoided or mitigated for new development through improved land development practices.

a. Why an Environmental Hazards Element?

This element is intended to comply with the State law that requires the inclusion of a seismic safety and safety element as part of every local government's adopted General Plan.[1]

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1. Government Code Section 65302(65302.1)-A Seismic Safety Element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effect of seismically-induced waves such as tsunamis and seiches. The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismically induced waves. A Safety Element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirement, minimum

Beyond this mandate, however, there are compelling reasons for citizens and decision-makers to concern themselves with identifying and mitigating hazards inherent in Belvedere's natural setting.

Homeowners, developers, and government officials experience environmental hazard impacts, often with significant property losses and occasionally with danger to people in their daily activities.

There have been small landslides, differential ground settlements, and soil shrinkages causing foundation cracking, road buckling, utility breakage and sometimes complete destruction of structures. In addition to these impacts by the environment in response to inadequately planned or engineered projects, there are unavoidable sudden dangers of flood or wildfire. These, too, draw most of their threat from the lack or inadequacy of land planning of an earlier time. Looming over all is the ever-present potential for another major earthquake as in 1906.

While these costs and dangers are impressive, they can often be avoided altogether, almost always be reduced, and, in the case of major earthquakes, at least be well prepared for.

Varying degrees of protection can be taken to safeguard against the hazards associated with the environmental conditions discussed in this element. The costs necessary to insure against damage can be very great, and judgments about the risk entailed must include the weight of the consequences for not undertaking such measures. Many of the recommendations which take the form of policies are measures which the City, as a rule, implements at the present time. Every year brings us a greater knowledge of the sciences which explain the complex phenomena and earth processes involved in these environmental hazards; each year our ability to assess risk and develop measures to preclude or mitigate such risk increases. The policy recommendations attempt to reflect the evolution of the "state of the art," and they demand a sophisticated degree of case by case evaluation.

There are many possible environmental hazards. Seismic and non-seismic geologic hazards, as well as fire and flood, are specifically included in this element because:

- They have all occurred in Belvedere in recent history, sometimes with devastating effect, and they all could occur again in the future, and

- These topics are mandated by state law to be part of each

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road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazard.

jurisdiction's adopted General Plan.

Environmental hazards not in this element include: vector-related health hazards, air pollution, water supply contamination, noise, airport landing and takeoff safety zones, and other issues which are not likely to significantly impact Belvedere.

B. SETTING

1. Geology

The terrain of Belvedere and Corinthian Islands consists of a complex assemblage of Franciscan formation rocks, such as serpentine, greenstone, graywacke, chert, shale, sandstone, and glaucophane schist. While most of these formations exist in small amounts on the islands, predominant are greenstone -- rocks of volcanic origin -- and sandstone -- tough, nonporous, thick-bedded graywacke. Quaternary deposits -- fine to medium grained sands, with minor amounts of clay possibly included, characterize the geology of some lower portions of the east side of Belvedere Island, including lower Beach Road and San Rafael Avenue. The Lagoon area is 1-1/2 feet to 3 feet of homogenous artificial fill materials over younger bay mud. The mud ranges in depth from a minimum of 20 feet to over 90 feet, according to tests by preconstruction borings.

2. Slope Stability

Belvedere has two different topographic settings that define sharply contrasting geologic conditions and stability problems which exist independent of any triggering seismic event. These are:

- The steep hills and ridges which are subject to landslides and downhill creep.
- The bay plains, marshlands, and mud flats subject to subsidence and differential settlement.

Until there is a major earthquake, these conditions are expected to be the source of most of the losses due to natural hazards in Belvedere.

3. Seismic Risks

Marin County occupies a geologic setting that is both complex and dynamic. The County lies astride the San Andreas fault, an active rupture between two great plates of the earth's crust. For many millions of years the Pacific Plate, which includes the Point Reyes Peninsula, has been migrating northwest, sporadically jerking and sliding past the North American Plate along this rupture. As a result, different bedrock sequences that originated up to hundreds of miles from each other have been juxtaposed on

opposite sides of the fault, which follows the trough-like Olema Valley and Tomales Bay.

Other than the San Andreas, no active faults, established as potential sources of earthquakes, are known within Marin County. However, most of the County is sandwiched between two major active fault zones, the San Andreas and the Hayward, both of which have generated significant earthquakes during the 200 years of recorded history of the area.

The predominant sources of earthquake damage to be expected in the uplands of Belvedere are from landslides and fires triggered by the shaking.

Because many streets in the hills traverse upslope landslide deposits, and streets are the usual routes of underground utility pipes, it should be expected that a significant earthquake generated in the north Bay Area will result in the disruption of some transportation routes and the rupturing of water, gas, and sewer lines as a result of earthquake-induced landslides.

The levels of risk both on Belvedere and Corinthian Islands and in the Lagoon area, based on the available information, suggest radical action is not warranted. In support of this view is the fact that, in housing areas similar to the Lagoon, where risks are obviously highest, houses of wood frame construction have survived ground shaking and subsidence -- even in the strongest known earthquake -- without loss of life. Structures with the highest potential hazard -- those on the Lagoon, and those of brick or stone or having large areas of glass -- could be made safer through remedial measures to reduce structural hazards. The earthquake in October of 1989 damaged several houses, sidewalks and roads in the Lagoon area of Belvedere. Older homes on Belvedere and Corinthian Islands may not meet seismic safety standards, especially with respect to proper attachment of framing to foundations, bracing of structural members, and shut-off systems for electrical, water, and gas lines. Such defects should be noted during the residential resale inspections so that they can be corrected.

In the absence of more definitive information indicating problems more severe than those known, community consensus is that these levels of risk are acceptable.

4. Fire Hazard

Fire protection for the City is provided by the Tiburon Fire Protection District, along with the volunteer fire department. However, the fire hazard potential in Belvedere continues to be a community concern. In part, the hazard is caused by the large number of eucalyptus trees with their highly inflammable droppings. It is also caused by the steep down and upslope portions

of some lots which, due to difficult access, grow wild and contain flammable debris and brush. Houses with wooden roofs and decks built close together, particularly on Corinthian Island and in the Lagoon area, also contribute to the fire hazard potential. The extremely narrow and winding streets on Belvedere Island and Corinthian Island are also an impediment to quick response by the Fire District. In 1987 the City Council adopted a Fire Sprinkler Ordinance which requires installation of fire sprinkler systems in new homes and during major additions or remodeling projects. In 1992 an Ordinance was adopted prohibiting the use of wooden roof materials.

In April of 1992 a Task Force on Fire Preparedness, appointed by the Belvedere City Council, submitted a report with 48 recommendations for fire preparedness. Many of their recommendations are incorporated in Sections C and D of this Element.

5. Emergency Access

Access for fire and police vehicles has been and will continue to be a significant concern. The narrow city roads present access difficulties, particularly where on-street parking by residents, guests, and construction vehicles makes the right-of-way too narrow to permit a fire truck, ambulance, or even a police car to pass. This problem was addressed to a large degree in 1989 when the City created a restricted parking program on Belvedere Island that requires all on-street parking to be within designated parking areas that are delineated by pavement markings. Parking within these designated areas provides the minimum 10' clearance required for emergency vehicular access. Violators of the restricted parking program should continue to be subject to substantial fines if their vehicles are found parked outside of the marked areas of the designated parking zone.

6. Flooding

During the January 1982 storms, a number of the properties fronting on Belvedere Lagoon experienced yard and house flooding. To some degree, this may have been partially due to poor maintenance of storm drainage systems. Further, there was little advance warning of the severity of the storm, which exceeded all recorded storms in Marin County. Since 1982, street drainage has improved and runoff decreased. A list of flooded properties is maintained by the City Engineer.

C. POLICIES AND OBJECTIVES

The following objectives serve to guide the development of Belvedere in a healthy and balanced environment.

- Closely regulate all construction activity in areas prone to fire, flood and landslides.

- To assure public safety in flood plains, and severe geologic risk areas, regulate the construction of concentrated or sensitive uses, such as schools, community facilities, and housing.
- Require thorough field investigation of geologic hazards as a prerequisite to Design Review and construction approval and require site stabilization to minimize such risks.

The following policies are a means of achieving a safe and high quality environment:

1. Expand public awareness of environmental hazards by actively advising citizens of the availability of local area hazard studies, sources of hazard information, and existing public services.

2. Continue to support scientific geologic investigations to refine, enlarge and improve the knowledge about active fault zones, areas of instability, severe ground shaking and similar hazards in Belvedere.

3. Construction shall be located and designed to avoid or minimize the hazards from earthquake, erosion, landslides, floods, and fire.

4. In the areas identified as subject to ground-shaking, the development of structures for human habitation, including residential and commercial uses, shall incorporate engineering measures to mitigate against risk to life safety, at least to the extent provided by the current Uniform Building Code adopted by the City of Belvedere.

5. Applications for developments or additions proposed to be sited on landslide deposits, non-engineered fill, or bay mud shall be accompanied by a geotechnical engineering investigation satisfactory to the Belvedere City Engineer directed to the problem of ground shaking and ground failure. The engineering geologist and civil engineer shall submit recommendations regarding site development, structural engineering, and drainage.

6. Projects[2] proposed for slopes rated 3 or 4 in stability classification (on maps prepared by the California Division of Mines and Geology) shall be evaluated for stability prior to consideration of site design or use. The evaluation shall include the structural foundation

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2. "Project" includes the construction or modification of an existing single-family home or accessory structure or larger project.

engineering of the actual site and shall include possible impact of the project on adjacent lands. Where, in the course of land development review, it is determined by the Belvedere City Engineer to be necessary, this evaluation shall also apply to remodeling and/or additions on existing single family lots.

7. In projects where such evaluations indicate that state-of-the-art measures can correct instability, the City should require that the foundation and earth work be supervised and certified by a geotechnical engineer, and where deemed necessary, by an engineering geologist.

8. Known landslides and landslide-prone deposits on steep slopes should not be used for development except where engineering and geologic site investigations indicate such sites are stable or can be made stable providing appropriate mitigating measures are taken. In such cases, it must be shown to the satisfaction of the City that the risk to persons or property or public liability can be minimized to a degree acceptable to the City.

9. Filled land which is underlain by compressible materials (bay mud, marsh, slough) should receive special attention during site planning. Soils investigations should include borings and sufficient examination to determine the location of former sloughs and other factors which would accentuate differential settlement. And, the investigation should delineate those areas where settlement will be greatest, subsidence will occur, etc., and should recommend the site preparation techniques which could be employed to preclude hazard.

10. The Fire Protection District and City's program of systematic lot and eucalyptus cleanup should be stepped up. The program works as follows: the owner is informed his property constitutes a fire hazard and is given a time limit to clean it up. If he fails to do so, the City cleans up the lot and assesses the owner.

11. The Planning Commission, with input from the Building Inspector and Fire Marshal should periodically review the building code to ensure maximum reasonable fire hazard protection.

12. All plans for development of vacant sites and major remodeling shall be referred to the Fire Marshal at the Tiburon Fire Protection District for review and recommendations.

13. To assure emergency and public service vehicular access in places where 10 foot road width is critical, vehicles which overhang those limits shall be cited for parking violations.

D. IMPLEMENTATION

The majority of the following implementation steps pertain to the review of development applications and to guiding staff and decision-makers in the consideration of land development in hazard zones. It is recommended that the first level of implementation be achieved in the following fashion:

1. Institutionalize the Environmental Hazards policies through review for possible amendment of the grading, subdivision, zoning, building code, design review, and other sections of City Code. Particular attention should be paid to the adequacy of building setbacks with respect to fire safety concerns.

2. Prepare for general public availability the hazard zone delineation maps, including floodways, seismic zones, and areas of relative slope stability enabling site plans to be designed according to the constraints of the site.

3. Consult the hazard zones maps in the preparation of Initial Studies required by the California Environmental Quality Act.

4. Address the hazard in the preparation of Environmental Impact Reports required by the California Environmental Quality Act.

5. A public education program should be initiated which periodically informs Belvedere residents about fire codes and encourages them to remove dead vegetation and to prune plants located too close to buildings.

6. An Evacuation Map should be prepared to illustrate evacuation routes for vehicles and pedestrians. Belvedere residents with special evacuation needs should be inventoried and planned for.

7. A program should be developed to place all power lines underground in Belvedere. The existing Belvedere Without Wires Committee should be encouraged to create an undergrounding priority list and schedule.

8. Belvedere Way has been improved to provide for safe pedestrian use and should be further improved to make the Grade available for vehicular use during emergencies.

VII. NOISE ELEMENT

In recognition of the adverse environmental impact of noise -- that excessive noise is socially disruptive, may be physically and psychologically damaging, and can diminish property values and levels of productivity -- the State now requires each community:

- to assess noise problems within the community,
- to measure and project noise impact of major transportation arteries,
- to adopt standards and criteria relating land use to reasonable noise levels, and
- to outline implementation measures.

A. SETTING

1. Sources

The City of Belvedere has increasingly found that noise is a source of community concern. Excessive noise from traffic, from construction equipment and activities, from yard/garden equipment, and other, more sporadic sources, including amplified music and speech from yacht club special events, is objectionable. Additionally, the irregular topography of the City, along with the surrounding water areas, causes noise to be transmitted in irregular ways, with some distant sources of noise seeming to be very near due to reflection off of water or hillside surfaces.

2. Definition of Terms

1. Decibel: A unit for measuring the relative loudness of sounds detectable by the human ear, abbreviated dB(A).

2. L_{eq} is the equivalent of a steady noise containing the same amount of energy as a fluctuating noise over the same period.

3. L_{dn} is the day-night average noise level, L_{eq}, with a penalty for the nighttime hours -- that is, noise levels occurring between 11 pm and 7 am are treated as though they are 10 dB noisier than they are.

3. Noise in Belvedere

The major noise generators affecting Belvedere are the two major roads serving the city: Tiburon Boulevard and the San Rafael Avenue - Beach Road loop. The following table shows existing and projected sound levels at selected distances from the center line of each road. Traffic noise includes buses.

Table N-1 - Traffic Noise

		Average Daily Traffic	Distance from C_L of Roadbed Noise Calculation in L_{dn} dB(A) 45	55	65	70	75	80
Tiburon Blvd. from Trestle Glen to Main St.								
	1974	15,824	1440	360	90	45	22	11
	1990	15,500-20,000	1600	400	100	50	25	12
San Rafael Avenue -Beach -Tiburon Blvd. (County)	1974	2,917	480	120	30	15	7	3
	1990	5,000-10,000	1120	280	70	35	17	8
	1990[1]	3,300	538	130	33	17	8	4

Using the "protection" level for residential areas of 55 dB(A), housing along Lagoon Road and the north end of Cove Road exceeds the limit because it is affected by Tiburon Boulevard traffic noise. Similarly, housing on both sides of the San Rafael Avenue - Beach Road loop is affected by Tiburon Boulevard. In these cases, however, neither existing nor projected levels fall into the hearing loss consideration category, and in fact range 5-10 decibels below the level.

The Noise Element of the Tiburon General Plan, adopted September 28, 1989, indicates that the noise measurement was 68 dB (A) 43 feet from the edge of Tiburon Boulevard at Lyford Drive. Lyford Drive is between Trestle Glen and Main Street on Tiburon Boulevard. This noise measurement shows that the noise level in 1989 was similar to the level in 1974, outlined in Table N-1 above.

By another mode of evaluation, community response, Belvedere can be characterized as a relatively quiet community in which noise is a significant community concern, even though in absolute terms, noise levels may not exceed legal standards. Because of the way in which noise tends to "bounce" around, noises are heard in locations which are quite unusual. Further, the topography tends to amplify some noises rather than absorb them.

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1. The "high" 1990 estimate done by the County is based on population projections resulting from uncontrolled operation of the market. It seems excessive since Belvedere is mostly developed, and since street capacity in the City will act as a brake on car trip increases over the next 20 years. Assuming modest increases in the use of auto alternatives, the second estimate, roughly a 10% traffic increase, is more likely.

Community Response Predictions Categories Related to Noise Level	L_{dn} for residential areas
I. Some noise complaints may occur, and noise may, occasionally, interfere with some activities.	55-65
II. In developed areas, individuals may complain, perhaps vigorously and group action is possible.	65-75
III. In developed areas, repeated vigorous complaints and concerted group action might be expected.	Over 75

Belvedere is a Category I community. Within Belvedere, there has been some sensitivity to the transmission of sound over water and to the use of noisy construction and yard/garden equipment such as leaf blowers and saws. In 1987, the City Council passed an ordinance banning gasoline powered leaf blowers. Amplified sound from events at the yacht clubs has also caused numerous complaints. The Belvedere Planning Commission limits construction activity to Monday through Friday between 8 A.M. and 5 P.M. when approving Design Review applications.

B. POLICIES

Belvedere should continue to maintain noise levels compatible with public health and safety within the city. In order to accomplish this, the City Council should direct the preparation of a comprehensive Noise Ordinance which addresses construction noise, amplified sound, hours of use for equipment, etc.

1. Belvedere shall develop a comprehensive Noise Ordinance regulating the hours and days of construction activity, limiting the use of yard/garden and construction equipment which generates significant noise, and regulating amplified sound systems used outdoors, and other noise sources considered objectionable by the community.

GENERAL PLAN SUMMARY

The following recommendations represent the major policies and proposals of the Belvedere General Plan.

A. LAND USE

1 Significant new development is discouraged. Building is permitted only on existing legal lots of record or new lots of legal size for the residential zone in which they lie.

2. Residential densities shall be controlled to preserve the character of Belvedere. The two single family zones -- R-15, requiring 15,000 sq. ft. of lot area per unit, and R-1, requiring 7,500 square feet of lot area per unit -- are retained.

3. New construction is to be in harmony with existing development. To ensure reasonable intensity of lot use, ensure high environmental quality, and maintain the density and character of the neighborhoods, the City has design review standards in addition to controls on height, bulk, floor areas, and setbacks.

4. The circulation system is to be retained essentially as is, with no improvements planned beyond those needed to remove safety hazards.

5. Opportunities to expand the supply of moderate income housing in response to needs of the current population are to be explored and implemented. A site adjoining the Christian Science Church on San Rafael Avenue was developed in 1988 into 11 units of senior citizen/handicapped moderate income housing. Whether or not to permit additional second units, above the original 50 units allowed, is a decision for the City Council.

6. The open water surrounding Belvedere is to be kept open in perpetuity. In 1984 the City adopted the Richardson Bay Special Area Plan, along with the other three cities and the County of Marin which adjoin the Bay. This Plan provides for a vessel-sewage no-discharge area to be created in Richardson Bay, and for changes to the anchorage regulations in the Bay and in Belvedere Cove which will help to eliminate the random anchoring of boats throughout the Bay. The City incorporates the policies of the Richardson Bay Special Area Plan (RBSAP) into this General Plan.

7. A desirable feature of every Belvedere home should be usable outdoor open space. Minimum usable outdoor living space standards were incorporated into zoning and building regulations for the multi-family zones. .

8. Views of the Bay, San Francisco, and the mountains are to be retained wherever possible. The Zoning Ordinance includes the provisions for the dedication of a view site or easement.

9. Present density standards (and existing densities) are as follows:

   a. R-1 zones: 2.5 to 5 dwelling units per gross acre. 6.75 to 13.5 persons per acre. The total floor area permitted, without an Exception, is 50% of the lot size in the R-1C (Corinthian Island) and R-1L (Lagoon Area) zones and 40% of the lot size in the R-1W (West Shore Road) zone.

   b. R-15 zone: 1 to 2.5 dwelling units per gross acre. 2.7 to 6.75 persons per acre. (Small lots in this zone raise the current density range to 1-3.0 d.u. per gross acre.) The total floor area permitted, without an Exception, is 33% of the lot size, except for the above-average sized lots.

   c. R-2 zone: 5 to 14.5 dwelling units per gross acre. 13.5 to 39 persons per acre.

   d. R-3/R-3C zones: 5 to 20 dwelling units per gross acre. 13.5 to 54 persons per acre.

   e. R-3/SC-H overlay: Same as R-3, except density may be increased upon Planning Commission's findings of benefit to the community and lack of environmental impact.

   f. C-1 Floor Area Ratio not in excess of 1:1. Not over 50% of lot covered. Minimum lot of 5,000 square feet.

10. Based on the seismic and geologic study in which the City participated with the County in 1975, additional regulations have been added to the City's code requir-

ing special geologic studies prior to any development of sites in hazard areas. Further studies may also show some small areas within existing residential zones which should not be developed for reasons of safety.

11. Definition and relocation of the City limit lines between Belvedere and Tiburon has been under discussion with the intent to solve the remaining problems. Concerns include the line through the Boardwalk Shopping Center, and resolution of the boundary of the Corinthian Yacht Club which has its clubhouse in Belvedere and its berths and parking area in Tiburon.

12. Opportunities to provide additional recreational facilities in Belvedere should be explored and encouraged. In particular, the existing lane and path system was surveyed in a 1986 study. (See Circulation Element).

13. A study of all remaining properties capable of being subdivided under present regulations should be undertaken with an analysis of the potential for additional development, geologic hazards, environmental impact, and other factors. If necessary, the zoning regulations and Subdivision Ordinance should be amended to change the conditions under which existing large lots may be divided.

14. Due to the close proximity of many homes in the Lagoon area, and the issues of privacy which this raises, consideration should be given to determining the feasibility of restricting the amount of second story building which can occur on each lot in the Lagoon area.

15. The City should periodically review its Zoning and Design Review Ordinances to determine if revisions are warranted, and to give the Planning Commission and City Council more current standards by which to review proposed building projects.

B. CIRCULATION

1. City policy to keep the present road network intact, as shown on the Circulation Map, should be continued. The City should conduct traffic studies as needed to address safety considerations for all of Belvedere's streets. Improvements to streets should be designed to improve the safety, sight distance, and parking conditions of the streets rather than to increase their capacity. Pedestrian circulation and safety should be an important consideration in determining what street

improvements are made. Sidewalks should be encouraged.

2. Traffic generated by construction activities, tourists, and special events (such as Opening Day, fireworks displays in the Bay, etc.) should be discouraged from using Belvedere's street system. Alternatives for construction traffic should be studied, and specific regulations about such traffic and the parking of construction vehicles should be implemented.

3. As required by ordinance, off-street parking is to be created and maintained through the planning approval. The City shall encourage residents to provide additional off-street parking and shall require that the parking requirements of the Zoning Ordinance are met. Further, the City should require that the off-street parking spaces be continuously available for the parking of cars and not used for non-parking use, such as storage or workshop space. Tandem parking (end-to-end spaces) shall not be considered to fulfill the requirements for more than one of the required parking spaces. The City shall also encourage the creation of additional on-street parking where it is possible to do so, either within the right-of-way or partially on private properties.

4. Alternatives to the use of private cars should be explored jointly with Tiburon and/or the County for feasibility in Belvedere. The purpose would be to serve intra-city and intra-Tiburon Peninsula transit needs, including pickup and drop off at key transit exchange points such as the ferry and Alto Wye. The development of a local taxi system for the Tiburon Peninsula should be encouraged.

5. The pedestrian system of lanes and paths should be upgraded. Belvedere Way has been improved to provide for safe pedestrian use and should be further improved to make the Grade available for vehicular use during emergencies.

6. The City should maintain all roads within the existing system in full service condition. If roads are damaged by slides or other disasters, they should be restored to full service as soon as possible. Two means of ingress and egress should be provided for every residence, except for very short cul-de-sacs.

C. HOUSING

1. The City shall maintain a reasonable rental stock,

recognizing the need for such units to accommodate those preferring to rent or those unable to purchase homes in Belvedere.

2. The City shall make available information regarding City, County, State and Federal housing programs and advise and assist low and moderate income elderly living alone and elderly on fixed incomes having difficulty continuing to own and maintain their homes.

3. The City shall seek to maintain and expand the supply of affordable housing for low- and moderate-income persons.

4. The City shall assist in the provision of housing for public employees.

5. The City shall provide financial assistance where possible through City budget allocations, fee waivers, or cooperation with private fund raising activities to expand housing opportunities in Belvedere and the neighboring housing market areas.

6. The City shall encourage the incorporation of energy efficient systems in all housing to help reduce overall operating costs and to conserve energy.

7. The City shall encourage and support development proposals which provide new housing for low and moderate income households.

8. The City shall support fair housing practices and shall encourage housing opportunities for all persons to purchase or rent adequate housing, regardless of age, race, sex, marital status, ethnic background, source of income or other arbitrary factors.

D. OPEN SPACE

1. Views are to be preserved.

2. Open space should be secured by a variety of means, including purchase, dedication of land, development rights, and view easements or view corridors. Provisions for dedication were incorporated as part of Zoning Ordinance revisions.

3. Encroachment on open water should be limited to public trust purposes. At present, open water is protected by a combination of public ownership, Audubon Society and yacht club ownerships, recreation zoning, and Army Corps of Engineers and Bay Conservation and Development

Commission (BCDC) jurisdiction. BCDC's San Francisco Bay Plan imposes such stringent limitations that it is unlikely development would be permitted on the few privately held open water lots. Additionally, the Richardson Bay Special Area Plan, adopted by the City in 1985, recommends against any development of open water areas. Zoning should be provided for these areas.

4. The scenic qualities of major circulation routes within the city should be enhanced.

5. All public and private actions that significantly affect the quality of the environment will be reviewed in accordance with the unique characteristics of each proposed action and each potential location under the specific mandatory procedures adopted. The responsibility for this review is delegated to the Planning Commission.

   As mentioned in the Land Use Element policy section, considerations of view, of compatibility with the surrounding environment, and of intensity of site use are factors to be reviewed.

6. Areas prone to geologic hazards should be closely regulated, field investigation of hazards prior to development should be required, and the City should consider dedication of land as open space for safety reasons. However, liability and insurance considerations may limit the City's ability to accept dedication of such properties or to permit their development.

7. The City should continue to cooperate with the Town of Tiburon in preserving open space in Tiburon which has a major visual impact on the views of residents of Belvedere. Further, efforts should be made to work with other neighboring communities in their efforts to preserve open areas which are visible from Belvedere. The City of Belvedere should preserve open space visible from neighboring communities.

E. ENVIRONMENTAL HAZARDS

1. Expand public awareness of environmental hazards by actively advising citizens of the availability of local area hazard studies, sources of hazard information, and existing public services.

2. Continue to support scientific geologic investigations to refine, enlarge and improve the knowledge about active fault zones, areas of instability, severe ground

shaking and similar hazards in Belvedere.

3. Construction shall be located and designed to avoid or minimize the hazards from earthquake, erosion, landslides, floods, and fire.

4. In the areas identified as subject to ground-shaking, the development of structures for human habitation, including residential and commercial uses, shall incorporate engineering measures to mitigate against risk to life safety, at least to the extent provided by the current Uniform Building Code adopted by the City of Belvedere.

5. Applications for developments or additions proposed to be sited on landslide deposits, non-engineered fill, or bay mud shall be accompanied by a geotechnical engineering investigation satisfactory to the Belvedere City Engineer directed to the problem of ground shaking and ground failure. The engineering geologist and civil engineer shall submit recommendations regarding site development, structural engineering, and drainage.

6. Projects proposed for slopes rated 3 or 4 in stability classification (on maps prepared by the California Division of Mines and Geology) shall be evaluated for stability prior to consideration of site design or use. The evaluation shall include the structural foundation engineering of the actual site and shall include possible impact of the project on adjacent lands. Where, in the course of land development review, it is determined by the Belvedere City Engineer to be necessary, this evaluation shall also apply to remodeling and/or additions on existing single family lots.

7. In projects where such evaluations indicate that state-of-the-art measures can correct instability, the City should require that the foundation and earth work be supervised and certified by a geotechnical engineer, and where deemed necessary, by an engineering geologist.

8. Known landslides and landslide-prone deposits on steep slopes should not be used for development except where engineering and geologic site investigations indicate such sites are stable or can be made stable providing appropriate mitigating measures are taken. In such cases, it must be shown to the satisfaction of the City that the risk to persons or property or public liability can be minimized to a degree acceptable to the City.

9. Filled land which is underlain by compressible

materials (bay mud, marsh, slough) should receive special attention during site planning. Soils investigations should include borings and sufficient examination to determine the location of former sloughs and other factors which would accentuate differential settlement. And, the investigation should delineate those areas where settlement will be greatest, subsidence will occur, etc., and should recommend the site preparation techniques which could be employed to preclude hazard.

10. The Fire Protection District and City's program of lot cleanup should be stepped up. The program works as follows: the owner is informed his property constitutes a fire hazard and is given a time limit to clean it up. If he fails to do so, the City cleans up the lot and assesses the owner.

11. The Planning Commission, with input from the Building Inspector and Fire Marshal, should periodically review the building code to ensure maximum reasonable fire hazard protection.

12. All plans for development of vacant sites and major remodeling shall be referred to the Fire Marshal at the Tiburon Fire Protection District for review and recommendations.

13. To assure emergency and public service vehicular access in places where 10 foot road width is critical, vehicles which overhang those limits shall be cited for parking violations.

F. NOISE

1. Belvedere shall develop a comprehensive Noise Ordinance regulating the hours and days of construction activity, limiting the use of yard/garden and construction equipment which generates significant noise, and regulating amplified sound systems used outdoors, and other noise sources considered objectionable by the community.

TECHNICAL APPENDIX
ENVIRONMENTAL HAZARDS ELEMENT

Landslides are not random--they occur in certain areas for specific and relatively predictable reasons, and not in other areas. Their likelihood should be accounted for in land use planning and in site development. Landslides and swelling soils constitute the principal geologic hazards to structures, roads and utilities in the uplands of Belvedere. Both are widely but unevenly distributed in the area, and both are related to the bedrock geology and the surface soils and colluvium derived by weathering of the bedrock.

The hills and ridges of eastern Marin sharply differ from place to place in the strength and relative stability of the rock formations and other geologic materials that underlie the surface. Even without knowing the identity of the underlying materials, these differences in strength and stability can generally be inferred by the presence, absence, or relative abundance of landslides on the various slopes. Where landslides are abundant, the slopes are likely to be inherently unstable; where landslides are few or lacking on the steep slopes, the slopes are relative stable. Even in those areas where very steep natural slopes have relatively few landslides, indiscriminate deep cuts, both for streets and house sites, can be expected to cause some serious and long-term problems. Adversely dipping fractures and bedding planes that are a part of the structure of the underlying rock may become planes of movement when undercut.

Landslide deposits are widely but unequally distributed. These surficial deposits of rock or soil materials have separated from their original position on slopes and have moved downslope under the influence of gravity. They exhibit characteristic topographic expressions that result from the downward and outward displacement of the landslide masses. Prominent topographic features that commonly develop in landsliding include scarps, terracelike benches that commonly have topographic sags or depressions on them, hummocky or disrupted ground surfaces, and anonmalous drainage patterns.

Most landslide deposits in Marin County are debris flows, but many or most of these are composite in their development. Typically such landslides originate as rotational slumps, but disintegrate with further movement into debris flows. On unstable slopes many such landslides commonly merge to form aprons of these deposits in which individual landslides are difficult or impossible to distinguish.

Where their topographic expressions have been modified or masked by erosion, forest cover, or grading operations, most landslide

deposits can be identified from exposures in gullys, road cuts, or other excavations. This is because they are typically composed of chaotic mixtures of angular rock fragments, of various sizes and orientations, that are embedded in an unconsolidated, fine grained, clay-rich matrix. One type of landslide, the debris avalanche, leaves a scar behind as the only evidence of its occurrence that can be recognized a year or more after the event. The source of this type of fast moving landslide is limited to the regolith (soil and colluvium), never bedrock, and the avalanche mass is so fluid that it flows to the base of the slope, or beyond, and spreads out as a thin coating of mud over the surface.

A typical soil debris avalanche involves a few hundred cubic yards of soil and colluvium and is the result of total saturation of a part of the regolity on a hillside. In general, it occurs only in sandy and silty soil that has little clay content. Such soils form principally on sandstone. During the last 20 years, they have occurred abundantly in Marin County when about 4 inches or more of rain has fallen in 10 hours or less. In some areas, however, they have occurred during normal rainfall as a result of excessive water introduced into the susceptible hillsides by domestic water use. Houses have suffered damage or destruction from these avalanches both by being struck by the fast moving flows and by being undermined because foundations were embedded in the soil that liquified, rather than in the bedrock beneath the soil.

Important elements in the determination of the potential stability of a landslide deposit include its position on the slope, the angle of the slope, and the state of consolidation and other physical characteristics of the deposit. Though introduced from time to time as evidence of relatively higher stability of landslide deposits, old age, apparent or actual, has little significance regarding the potential stability of such deposits.

Most landslide damage in Belvedere has probably taken place within pre-existing landslide deposits as a result of continuing or renewed movement within them. The great majority of these damaging landslides are soil and rock debris flows developed on slopes underlain by Franciscan melange. Their heaving soils and slow downslope movements strain houses by cracking foundations, and crack and disrupt streets and utilities. Most of the landslide deposits that show on our maps are of this type.

Soils that swell when wet and shrink when dry also cause considerable damage to structures, streets, and some areas of Belvedere. These soils are clay-rich, composed largely of montmorillonite, an expansive clay mineral. These soils form in areas underlain by Franciscan melange where the fine-grained matrix of that unit is abundant. Such soils are dark gray in most places. In late summer they exhibit wide desiccation cracks

(1 to 3 inches wide in many places), and at this time the soil is literally rock hard. Swelling of the clay minerals closes the cracks in the wet season, and the soil then is plastic and very weak. The forces exerted during expansion and contraction are sufficient to heave and distort buildings, and to crack shallow foundations and pavements. Such soils should be recognized prior to construction, and special engineering methods used to help reduce the stresses on buildings. The expansion-contraction characteristic of these soils causes slow downslope creep of the surface where they lie on a slope, thus adding to their potential for disruption of structures and facilities. These soils are abundant in most landslide deposits that lie on melange slopes and are the principal reason for the inherent instability of such slope deposits.

Developments on fill placed upon the marshlands and mud flats of San Francisco Bay are susceptible to several severe types of stability problems. Such developments have been the cause of distress to individual citizens, and public expense for many years. This is primarily because the continuing subsidence of fill results in intermittent flooding of residential neighborhoods, and because differential settlement of fill damages structures, utilities, and roadways.

The bay mud that underlies marshlands and mud flats (and many existing developments on fills placed upon such lands) is an unconsolidated, jelly-like material that is both highly compressible and subject to lateral flow when loads are placed on it.

Slope stability on greenstone and sandstone is high, except where it has been heavily altered or sheared. Since Belvedere is urbanized, the net effect on slide development is difficult to determine. Non-engineered or improperly engineered cuts usually reduce the stability of that slope and may possibly reactivate an old slide, or develop new ones. Other aspects of urbanization, such as the paving of streets, construction of many houses, installation of storm drains, and planting or trees and shrubs, may have the opposite effect by increasing the amount of rainfall necessary to saturate a large area of ground and by stabilizing the uppermost portions of the soil. Available information suggests there may be some slope stability problems in the rock areas where there are slope debris of landslide deposits. Severe winter storms in 1982, 1983 and 1986 triggered significant landslides, closing West Shore Road, near its southeastern end, and Beach Road. A list of these slides is maintained by the City Engineer. A total of 48 reported slides occurred in 1982-1983.

Slope stability of the quaternary deposits along lower Beach Road and San Rafael Avenue is considered moderate. On the areas filled over bay mud, it is considered low.

The greatest Bay Area earthquake about which detailed quantitive information has been established is the April 18, 1906 shock on the San Andreas fault, which has traditionally been rated at 8.25 magnitude on the Richter scale. This would be the key seismic point of historical reference for Marin in any event, but the more so since its epicenter was located in the vicinity of Olema in western Marin.

San Francisco suffered well known spectacular property damage and some 450 direct or indirect deaths from that earthquake, while Santa Rosa and other more built-up urban areas also experienced substantial property losses to a lesser extent. Marin, being sparsely inhabited, experienced relatively moderate property losses and only two deaths.

Damage in Belvedere was characteristically from fallen chimneys and cracked walls. The 1906 earthquake was the last significant seismic event with its epicenter located in Marin or which produced significant damage or ground movement phenomena in Marin, although minor effects of moderate Bay Area shocks epicentered elsewhere were felt in parts of Marin.

In terms of human and economic losses, seismic shaking is the most significant factor contributing to the overall earthquake hazard. Shaking contributes to losses not only directly through vibratory damage to man-made structures but also indirectly through triggering of secondary effects such as landslides or other modes of ground failure. This, an important element in attempting to classify areas by seismic risk, is the geographical assessment of potential ground shaking.

Belvedere experienced its greatest ground shaking damage in the 1906 earthquake, which, unlike the damage resulting directly from ground displacement, was prevalent in eastern Marin as well as along the San Andreas fault zone in the west.

The post-1906 moderate Bay Area earthquakes with epicenters elsewhere were felt in Marin, but with maximum intensities (modified Mercalli) of only V or VI and usually very slight damage. The strongest shaking effects experienced since 1906 occurred on October 17, 1989 during the Loma Prieta earthquake that was center approximately 85 miles south of Belvedere. The shock measured 7.3 on the Richter scale and while substantial damage was experienced as far north as Oakland and San Francisco, Belvedere suffered only minor property damage. Most reports were of displaced sidewalk sections, a few cracked foundations and a number of broken residential lateral water line connections. While the tremor was quite sharp and caused many objects to fall from shelves and walls, no injuries were reported within the City limits.

Fire is also likely to be a destructive by-product of a great earthquake in this area--perhaps by far the worst if the earthquake occurs during the dry season. Fire was the significant source of property damage in the 1906 earthquake. It should be expected that many fires would be ignited from a major or great earthquake. These fires would probably be caused by gas appliance pilot flames which would ignite the gas escaping from ruptured pipes, especially from top-heavy water heaters which could come loose from their pipe connections.

The rock portions of Belvedere and Corinthian Islands are likely to be relatively safe during an earthquake since damage from ground shaking has been minimal in areas of similar geology. Surface faulting is unlikely since Belvedere lies between the two main active faults in the Bay Area: the Hayward Fault to the east, the San Andreas Fault to the west.

In the Lagoon area, seismic risks do exist in several forms: first, earthquake ground motion may be amplified in the unconsolidated, water-saturated sediments underlying the lagoon's housing pads. Second, subsidence is also possible, although because of the homogenous nature of the fill, such settling would be more likely to be evenly distributed than differential. Third, there may be a danger from tsunami, that is an earthquake-generated wave, from some far distant source.[1] This danger also extends to other low-lying areas in the city.

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1. Tsunamis are large ocean waves generated by rapid changes in elevation of large masses of earth and ocean, such as occurs with vertical faulting beneath the ocean.

BELVEDERE GENERAL PLAN STUDY ROSTER

City Council:

Kenneth G. Johnson, Mayor
Justin Faggioli, Vice-Mayor
Robert Fonarow
Ann Otter
Lani Valentine

Planning Commission:

Daniel B. Gale, Chairman
John Pearson, Vice-Chairman
James Helfrich
Anne Kasanin
Steger Johnson
Corinne Wiley
Mordechai Winter

City Staff:

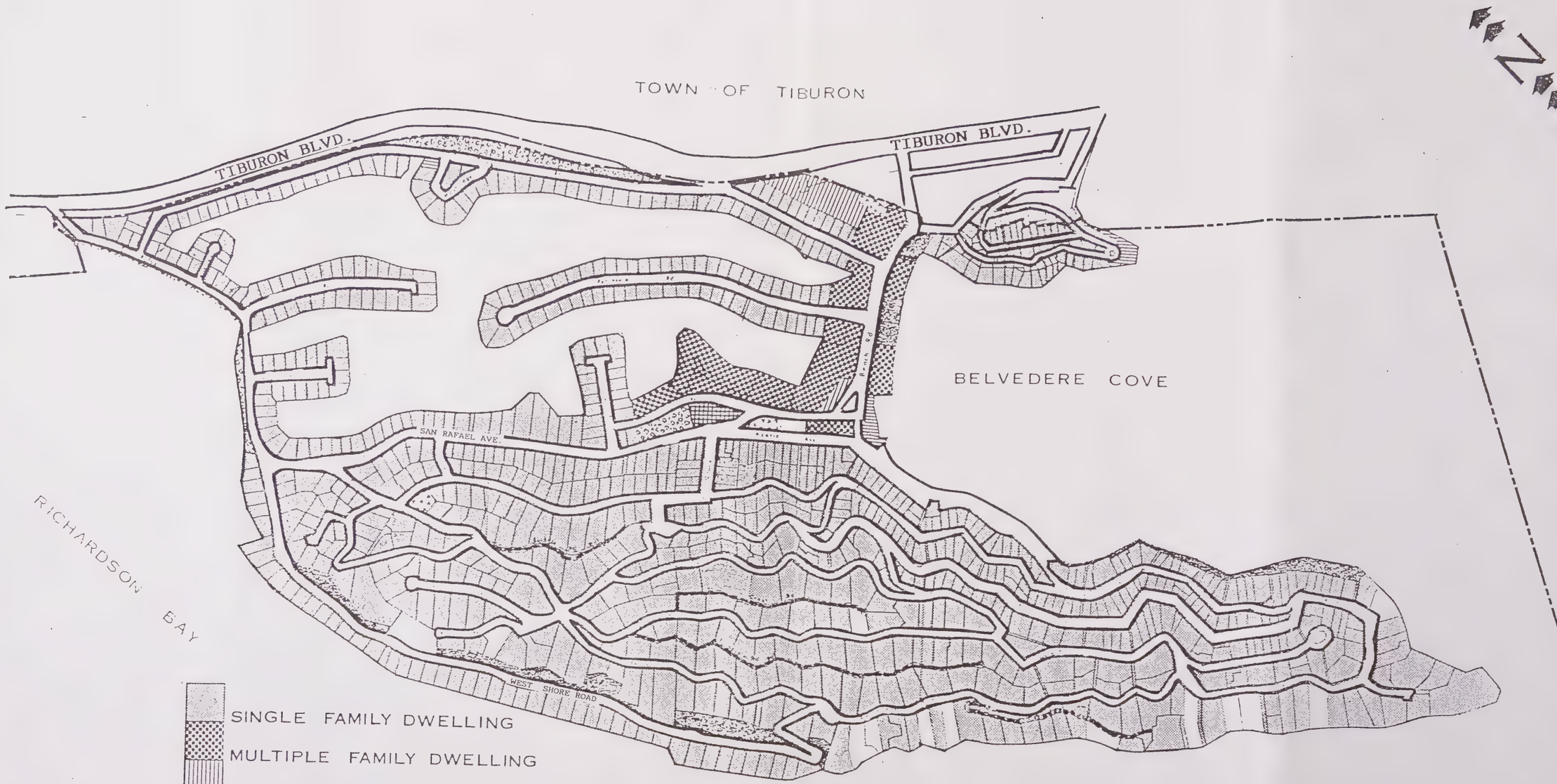
Ed San Diego, City Manager
C. I. Donald, City Engineer
Art Gibney, Public Works Superintendent
Lee Braun, Building Official
Pat Loy, Deputy City Clerk/Administrative Assistant
Louise Dowling, Planning & Building Secretary

City Attorneys:

Gary T. Ragghianti
Lisa Goldfien

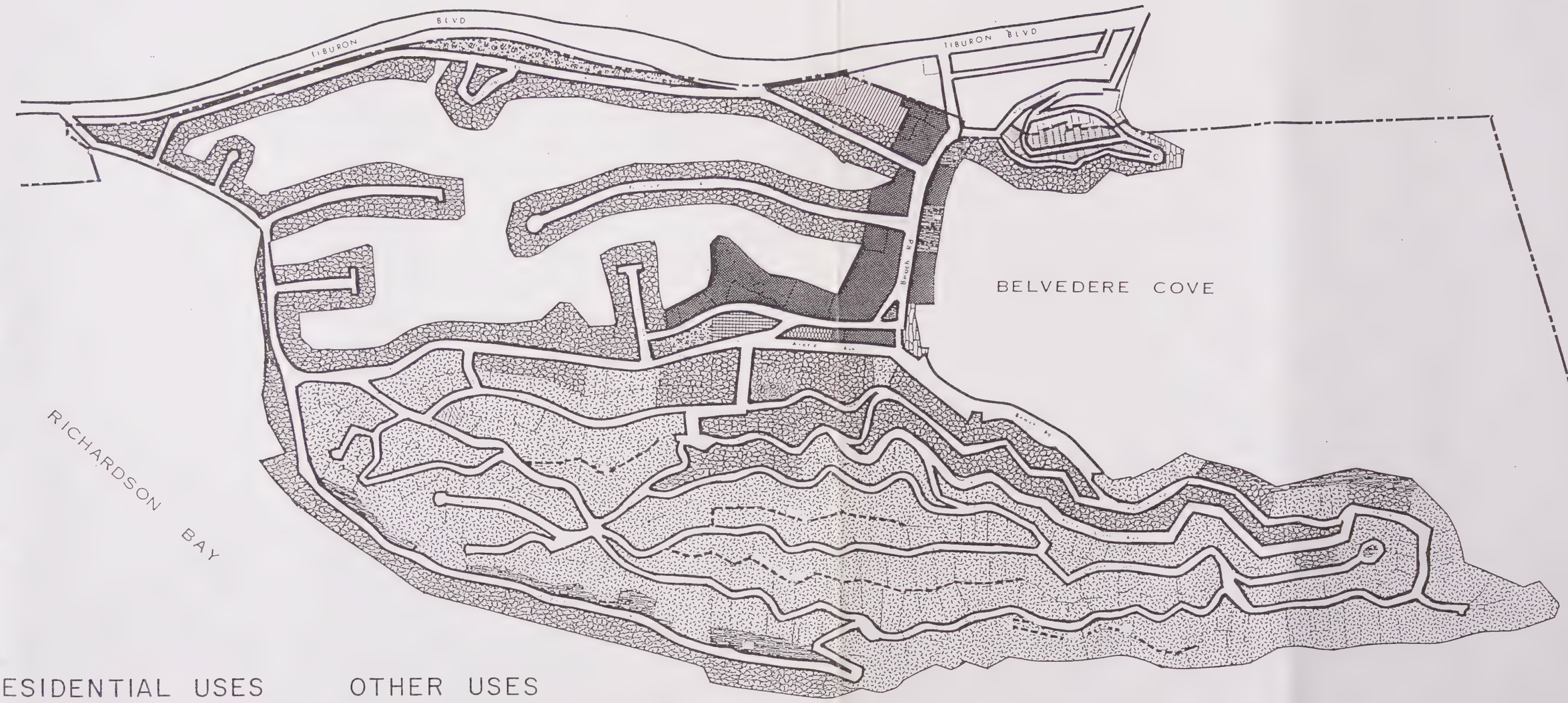
Consultant:

Western Ecological Services Company, Inc. (WESCO)
Michael Foley



GENERAL PLAN
CITY OF BELVEDERE
EXISTING LANDUSE

EXHIBIT 1



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RESIDENTIAL USES
(density in units per acre)

- Low 1-2.5 units
- Medium 2.5-5 units
- High over 5 units
- Multi-Family 5-20 units

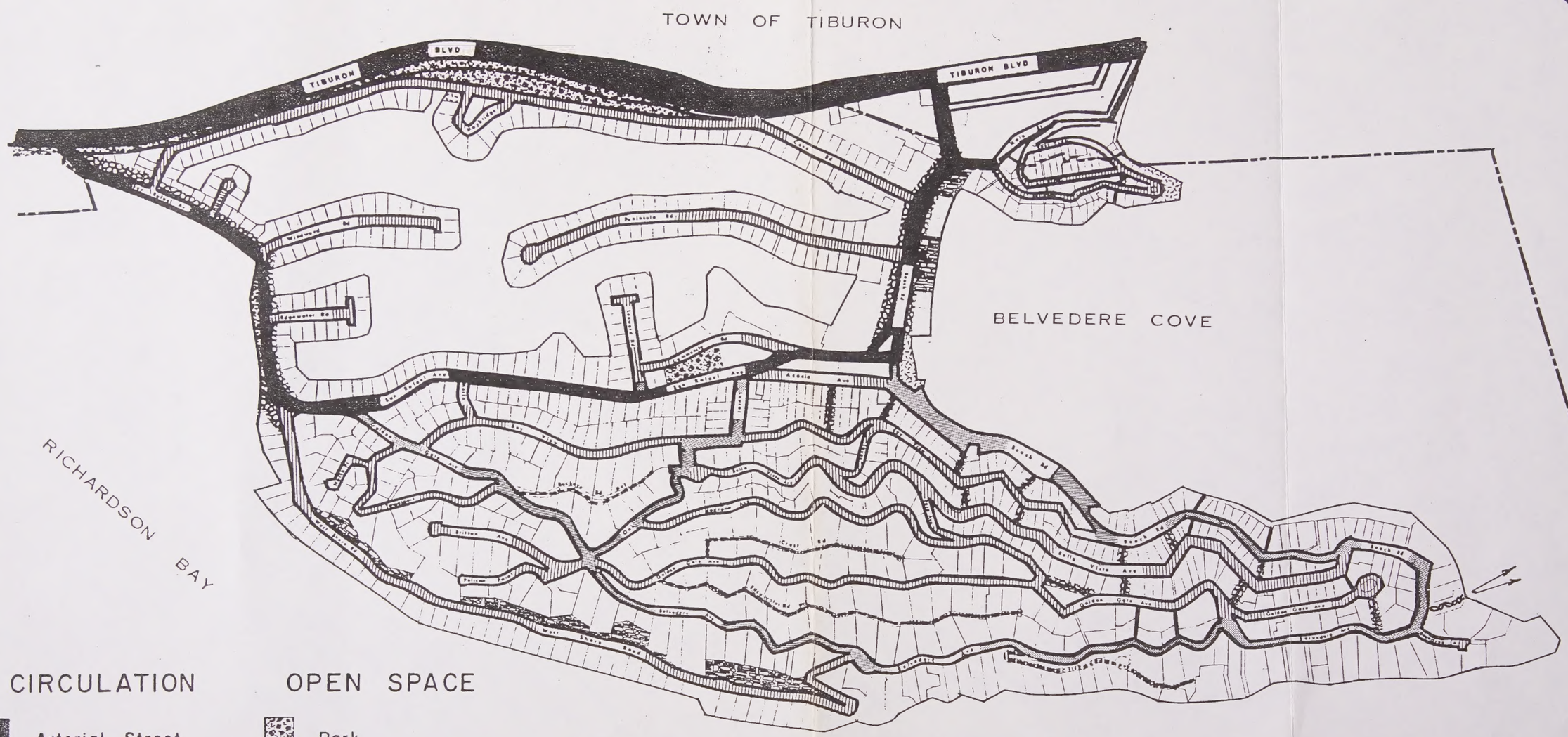
OTHER USES

- Commercial
- Open Space
- Park
- Public Facility
- Church or School
- Private Recreation

SCALE
0' 300' 600'

GENERAL PLAN
CITY OF BELVEDERE
FUTURE LANDUSE

EXHIBIT 2



CIRCULATION

- Arterial Street
- Collector Street
- Neighborhood Street
- Improved Lane
- Unimproved Lane
- Bicycle Path

OPEN SPACE

- Park
- Open Space
- Private Recreation
- Scenic Corridor
- Visual Easement

SCALE
0' 300' 600'

GENERAL PLAN
CITY OF BELVEDERE

EXHIBIT 3